

FIG. 1

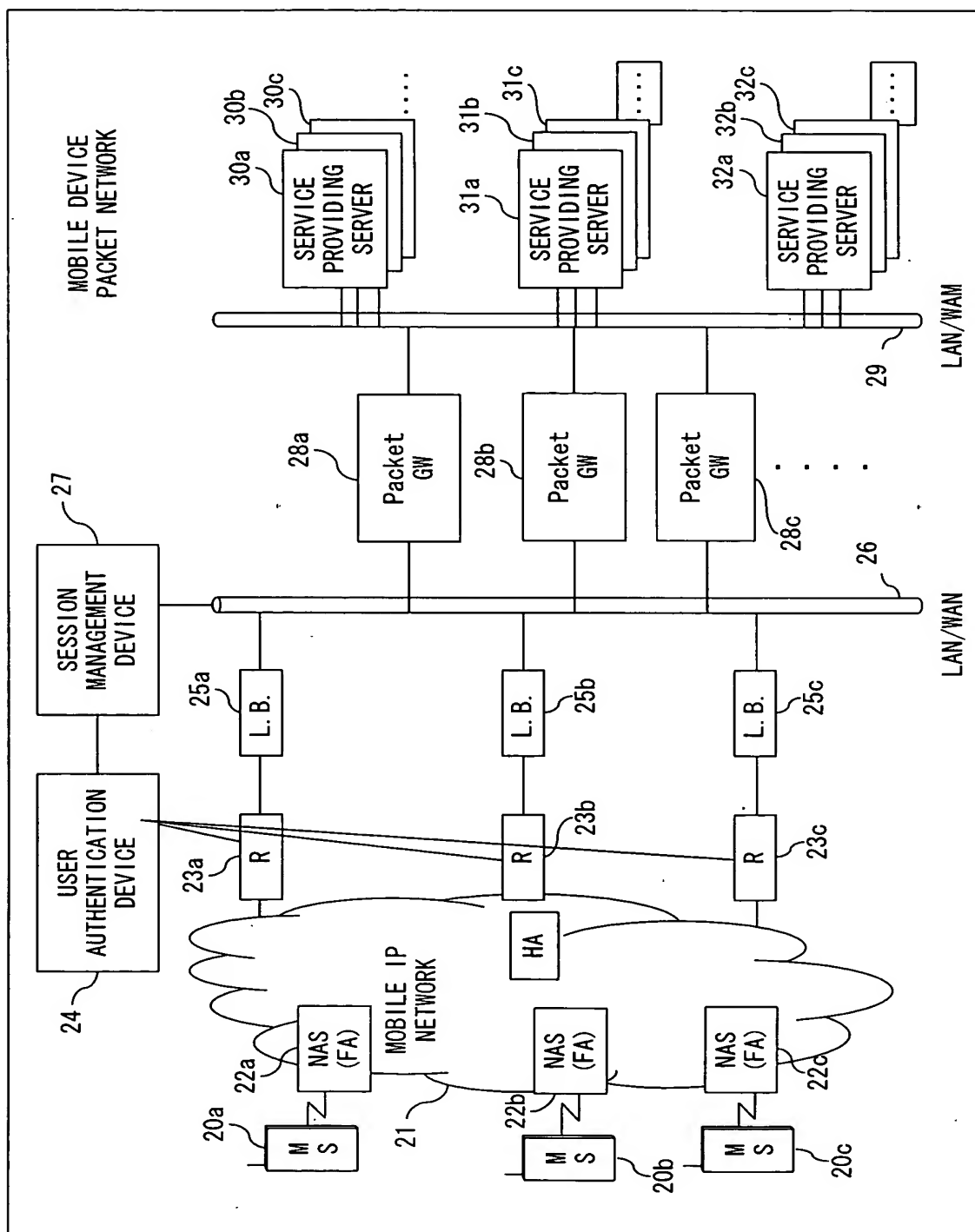


FIG. 2

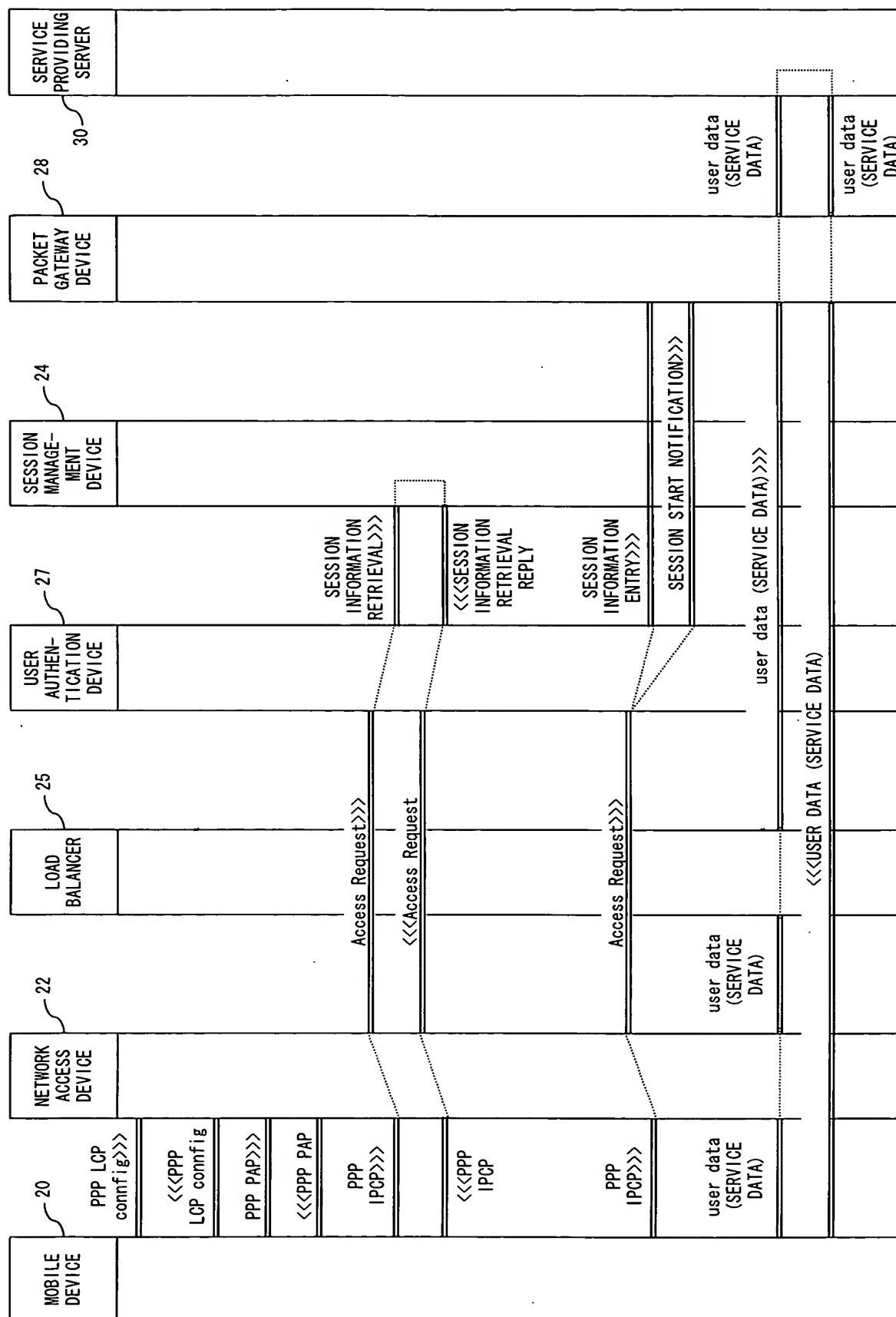


FIG. 3

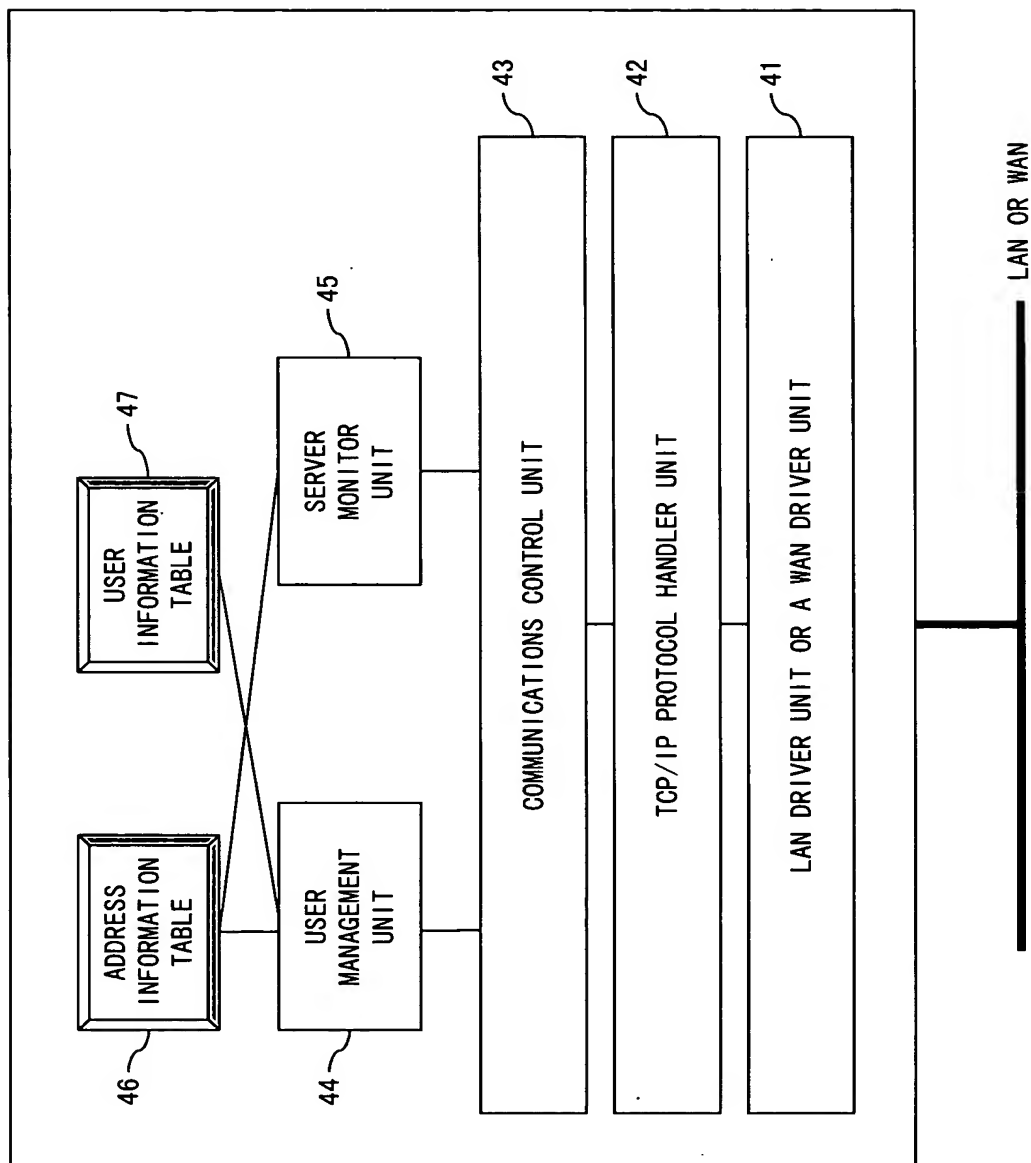


FIG. 4

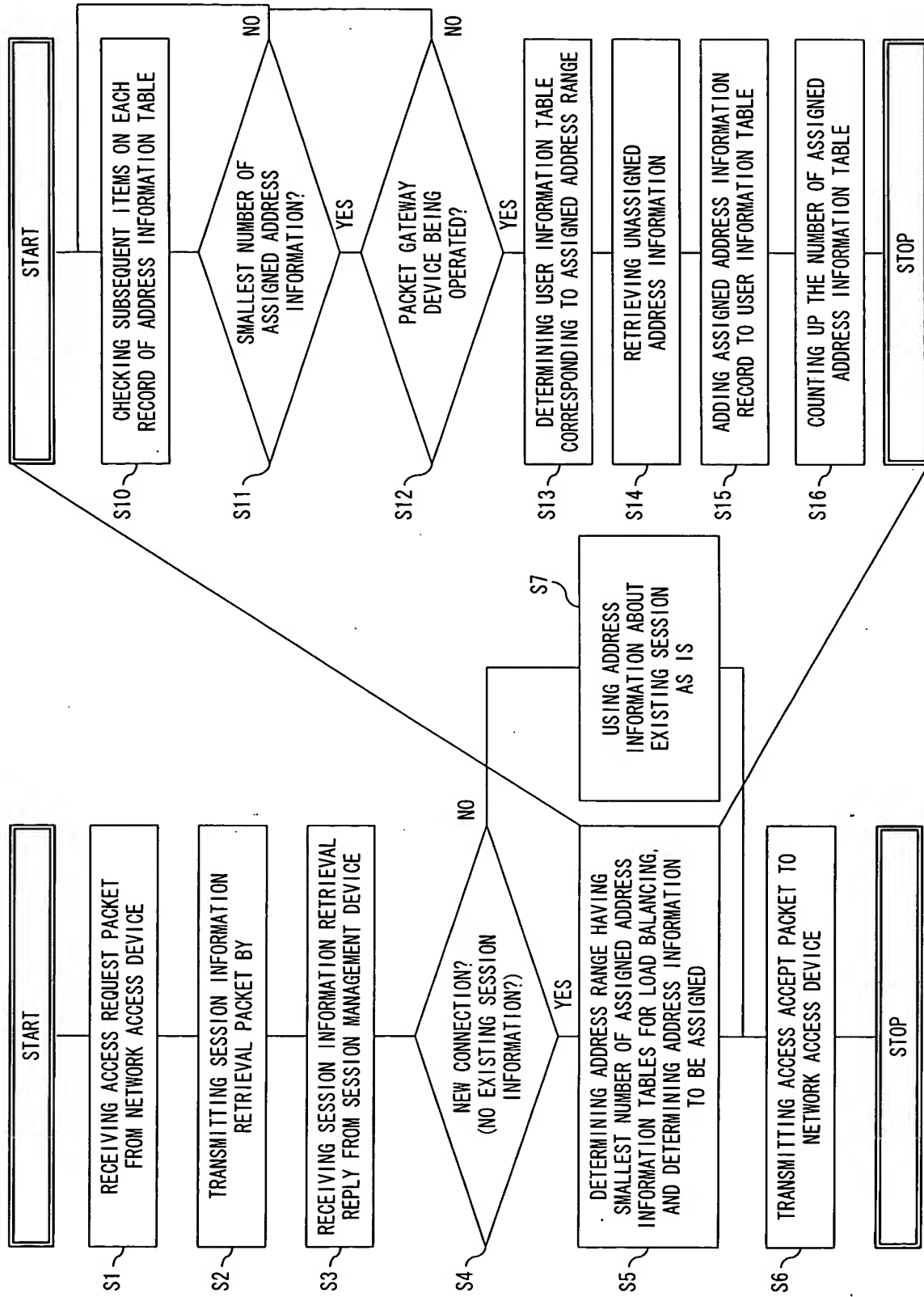


FIG. 5

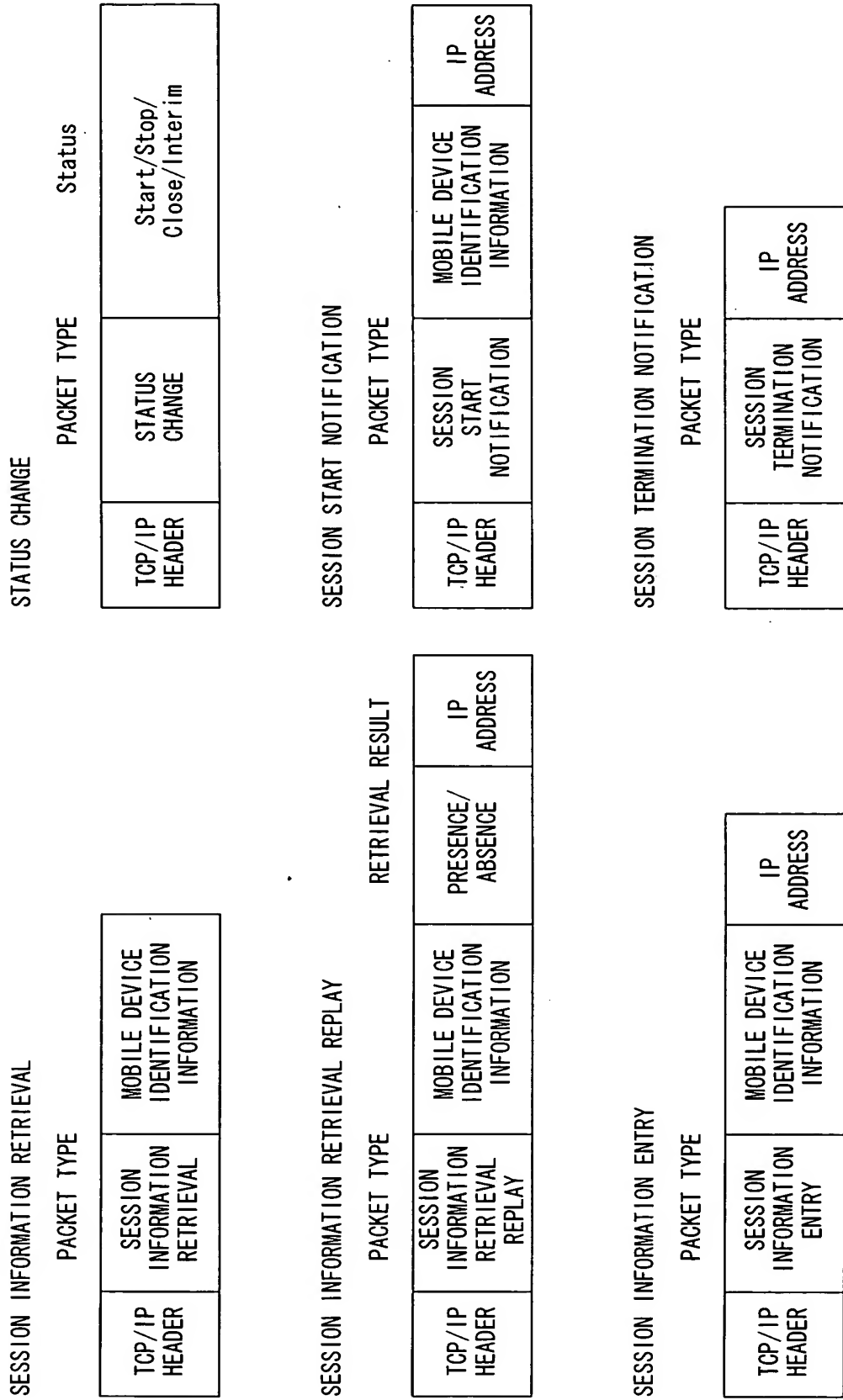


FIG. 6

PACKET GATEWAY DEVICE	PACKET ASSIGNMENT RANGE		NUMBER OF ASSIGNED IP ADDRESSES	OPERATING STATUS OF PACKET GATEWAY DEVICE	USER INFORMATION TABLE ADDRESS
Pgw1	10. 0. 0. 1	10. 32. 0. 1	20	OPERATING	*
Pgw2	10. 32. 0. 1	10. 64. 0. 1	20	OPERATING	*
Pgw3	10. 64. 0. 1	10. 96. 0. 1	20	OPERATING	*
Pgw4	10. 96. 0. 1	10. 128. 0. 1	19	OPERATING	*

FIG. 7

USER IDENTIFICATION INFORMATION				ASSIGNED IP ADDRESS INFORMATION
USER IDENTIFIER	PASSWORD	MOBILE DEVICE IDENTIFICATION INFORMATION	PHONE NUMBER	IP ADDRESS
E0658	E0658aaaa	F50200001	9077771111	10. 32. 0. 1
E0668	E0668aaaa	F50200002	9077771112	10. 32. 0. 2
E0678	E0678aaaa	F50200003	9077771113	10. 32. 0. 3
E0688	E0688aaaa	F50200004	9077771114	10. 32. 0. 4

F I G. 8

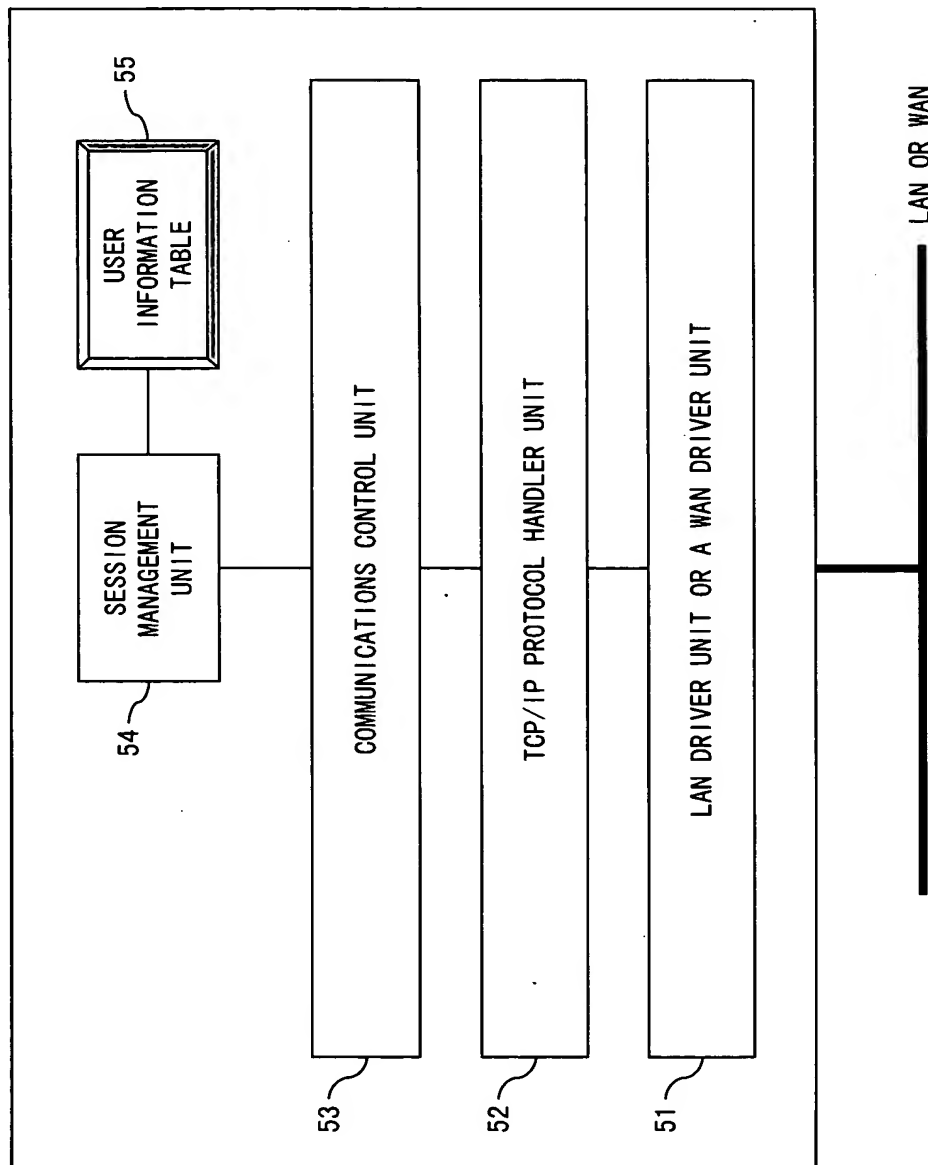
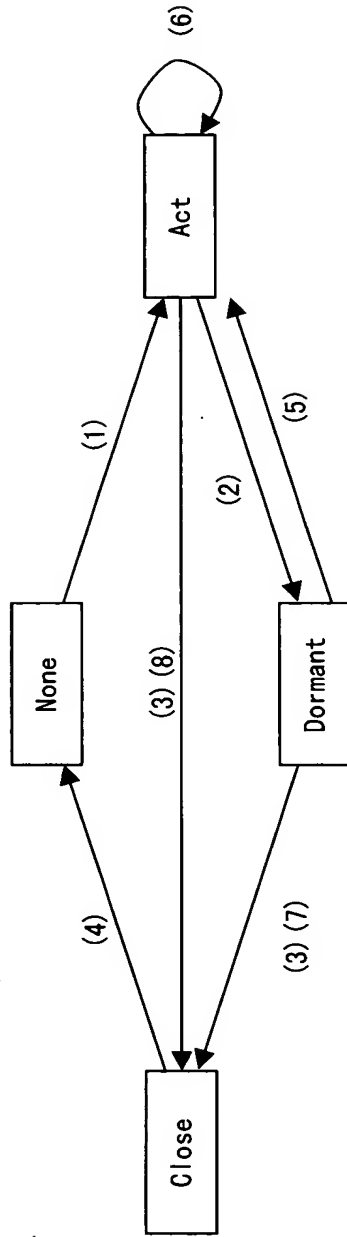


FIG. 9

SESSION IDENTIFICATION INFORMATION	MOBILE DEVICE IDENTIFICATION INFORMATION	ASSIGNED IP ADDRESS INFORMATION	SESSION STATE
		IP ADDRESS	
10010001	F50200001	10. 32. 0. 1	Act
10010002	F50200002	10. 32. 0. 2	Act
10010003	F50200003	10. 32. 0. 3	Act
10010004	F50200004	10. 32. 0. 4	Act

FIG. 10



NUMBER	STATE TRANSITION TRIGGER
(1)	SESSION INFORMATION ENTRY FROM USER AUTHENTICATION DEVICE
(2)	STATUS CHANGE (STOP) FROM USER AUTHENTICATION DEVICE
(3)	STATUS CHANGE (CLOSE) FROM USER AUTHENTICATION DEVICE
(4)	SESSION LOG OUTPUT
(5)	STATUS CHANGE (START) FROM USER AUTHENTICATION DEVICE
(6)	STATUS CHANGE (INTERIM) FROM USER AUTHENTICATION DEVICE
(7)	SESSION TIMER TIMEOUT
(8)	INTERIM MONITOR TIMER TIMEOUT

FIG. 11

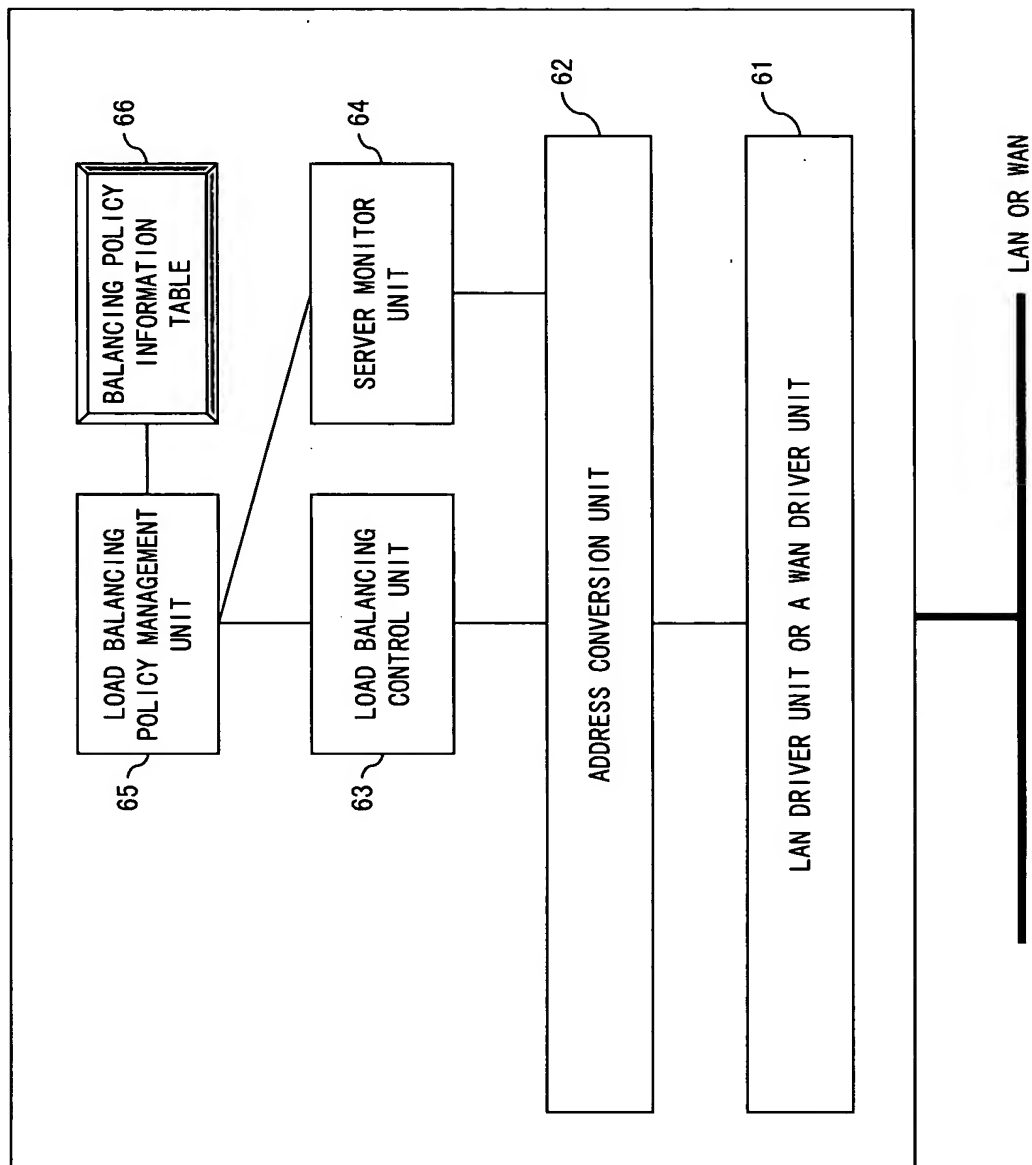


FIG. 12

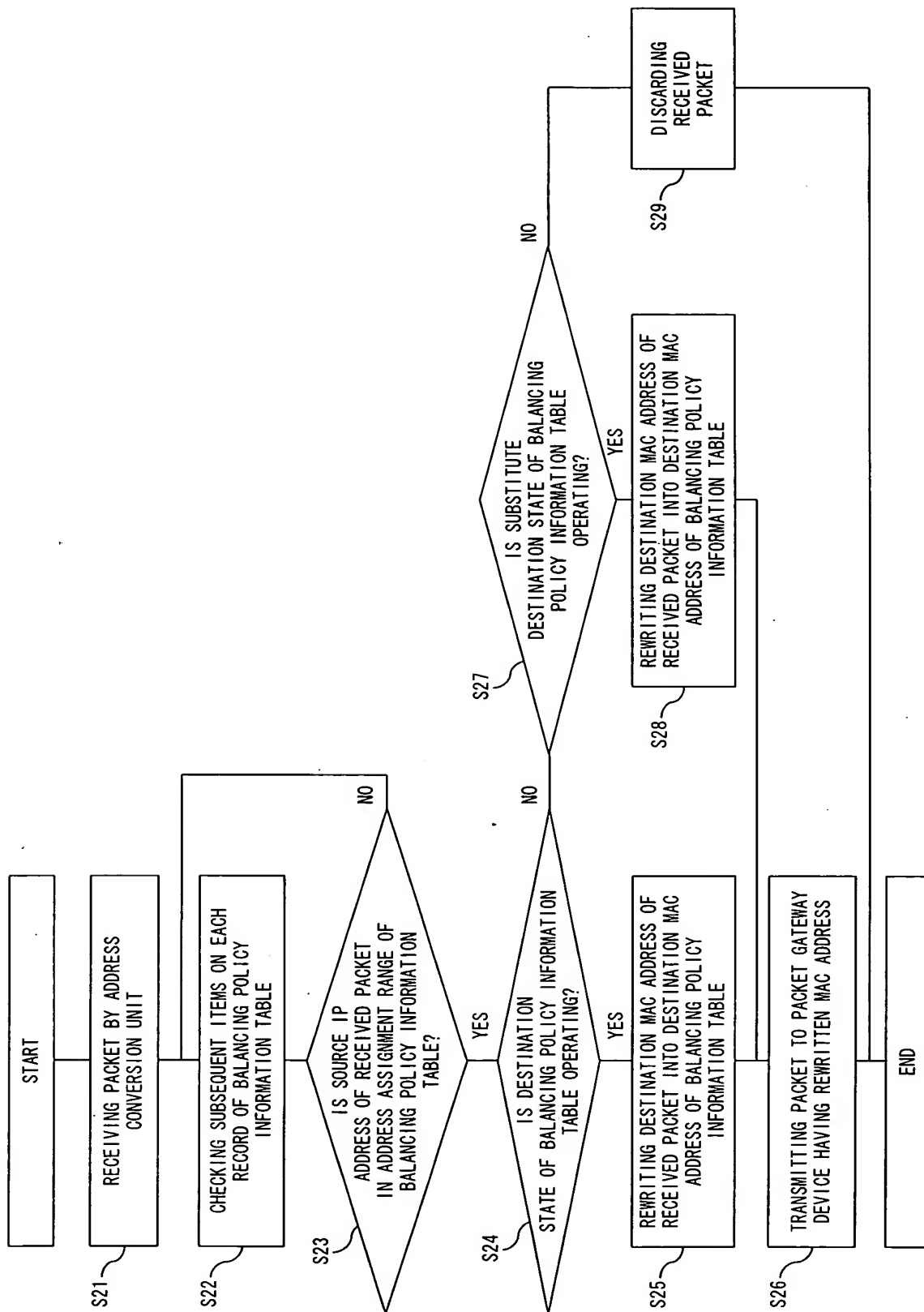


FIG. 13

IP ADDRESS ASSIGNMENT RANGE		DESTINATION MAC ADDRESS	DESTINATION STATE	SUBSTITUTE DESTINATION MAC ADDRESS 1	DESTINATION STATE
10. 0. 0. 1	10. 32. 0. 0	MAC5	NORMAL	MAC6	NORMAL
10. 32. 0. 1	10. 64. 0. 0	MAC6	NORMAL	MAC5	NORMAL
10. 64. 0. 1	10. 96. 0. 0	MAC5	NORMAL	MAC6	NORMAL
10. 96. 0. 1	10. 128. 0. 0	MAC6	NORMAL	MAC5	NORMAL

FIG. 14

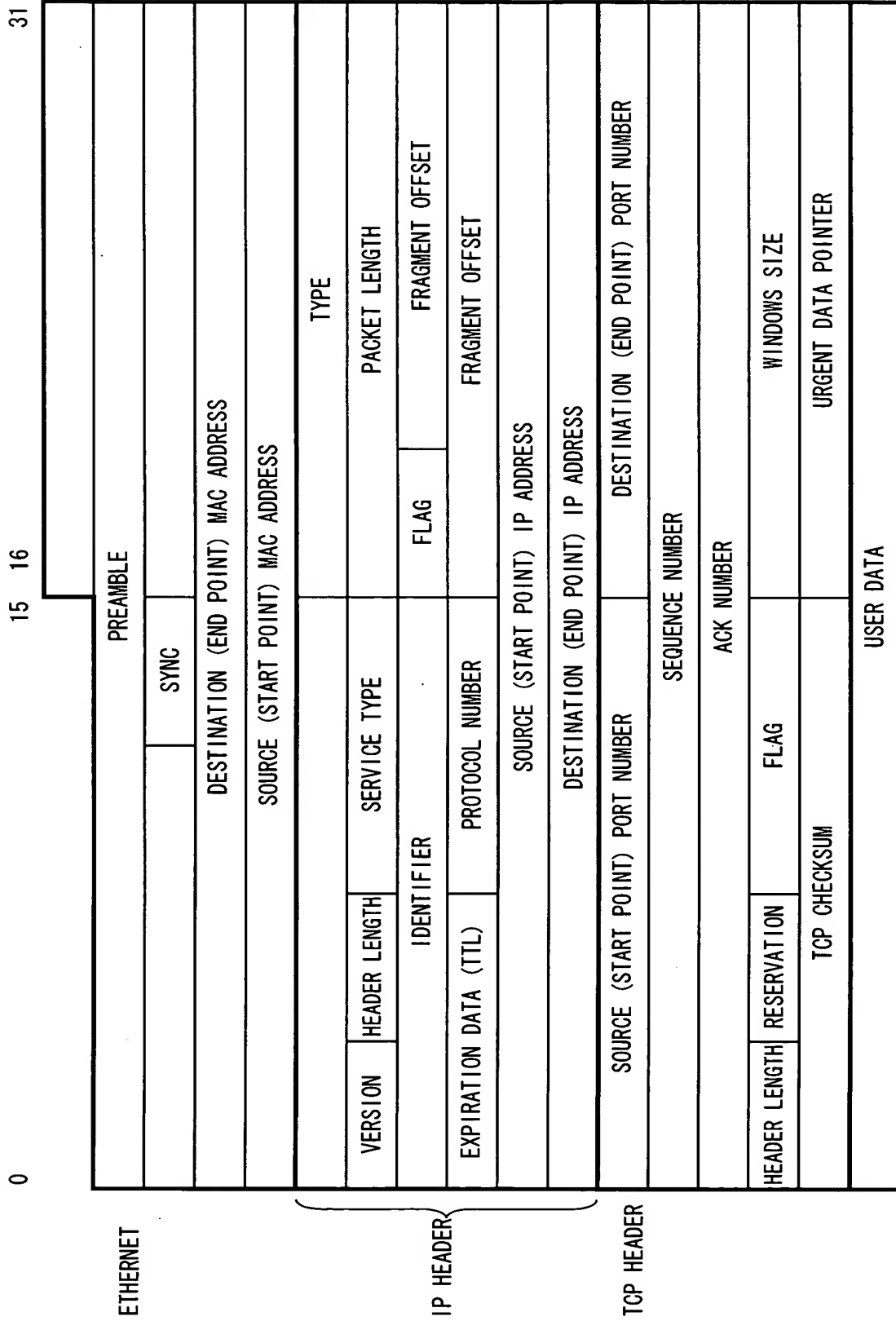


FIG. 15

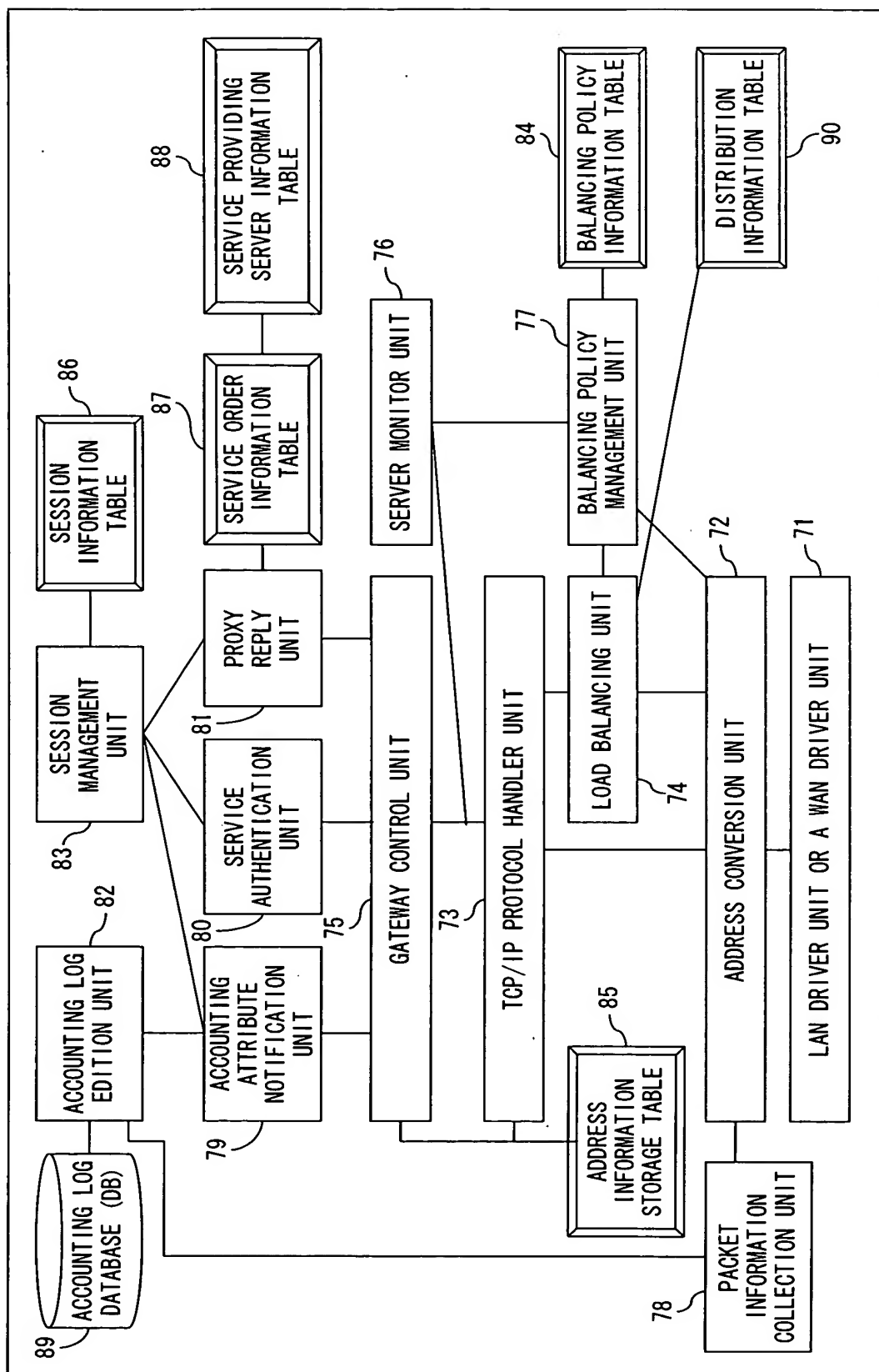


FIG. 16

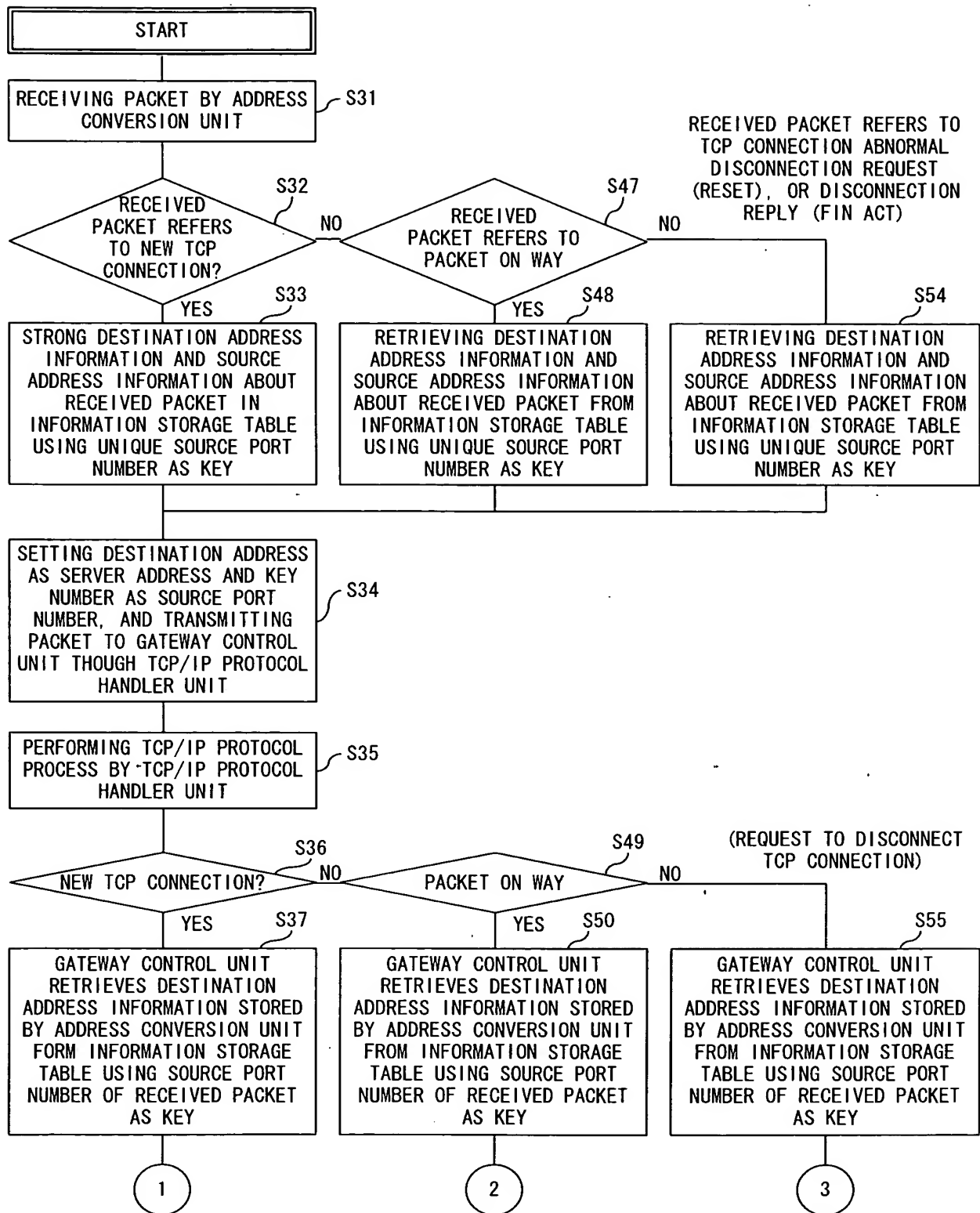


FIG. 17

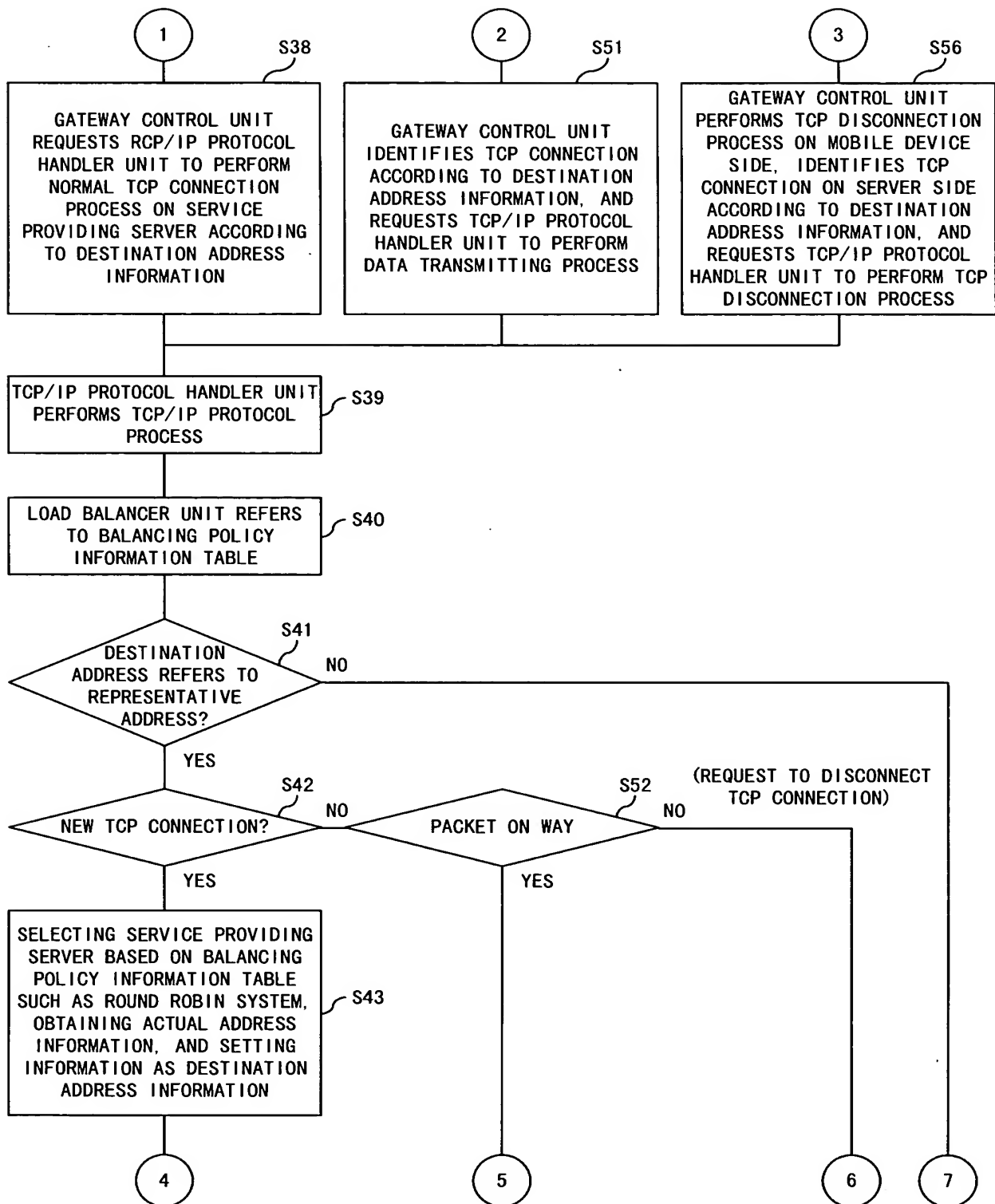


FIG. 18

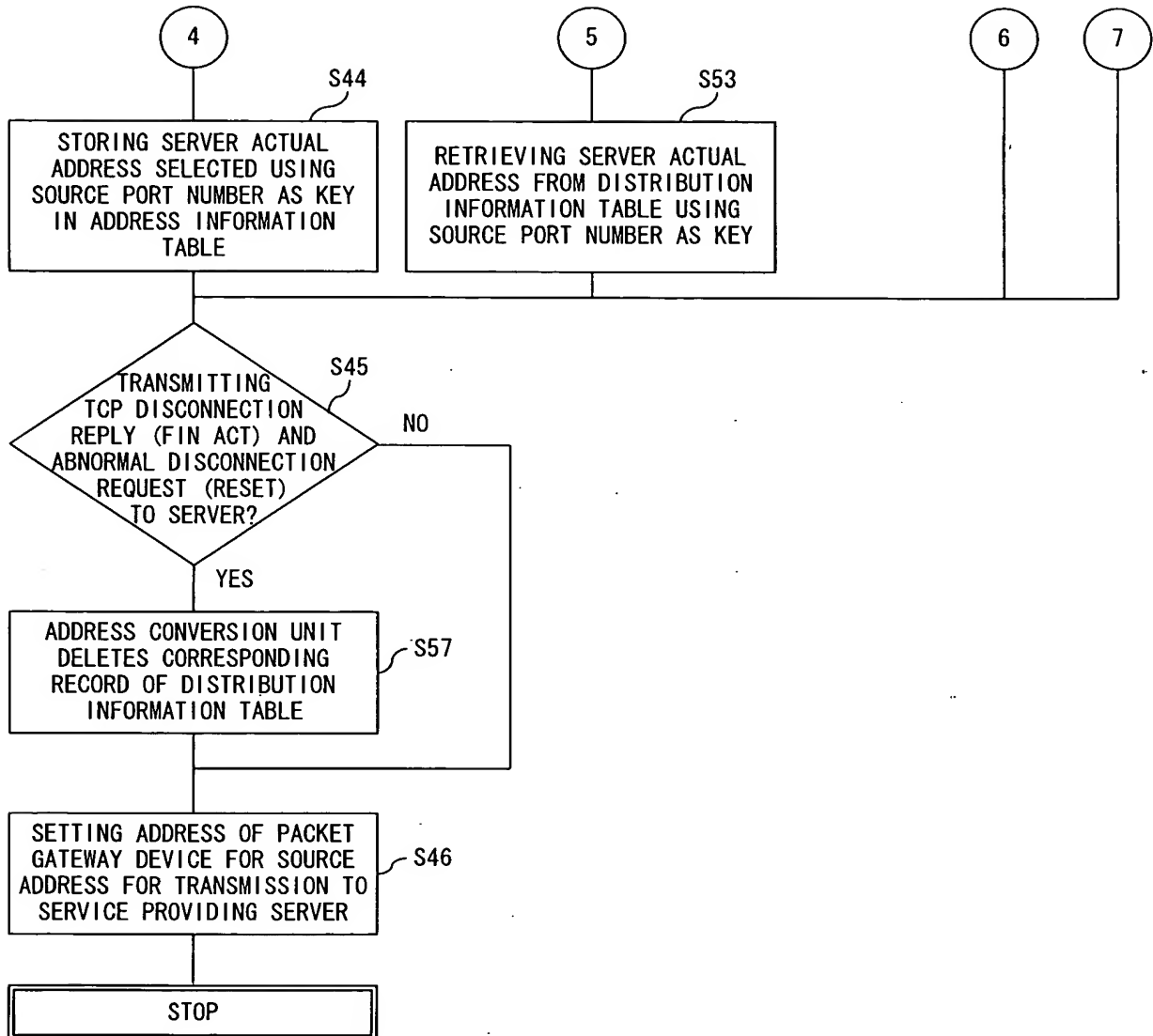


FIG. 19

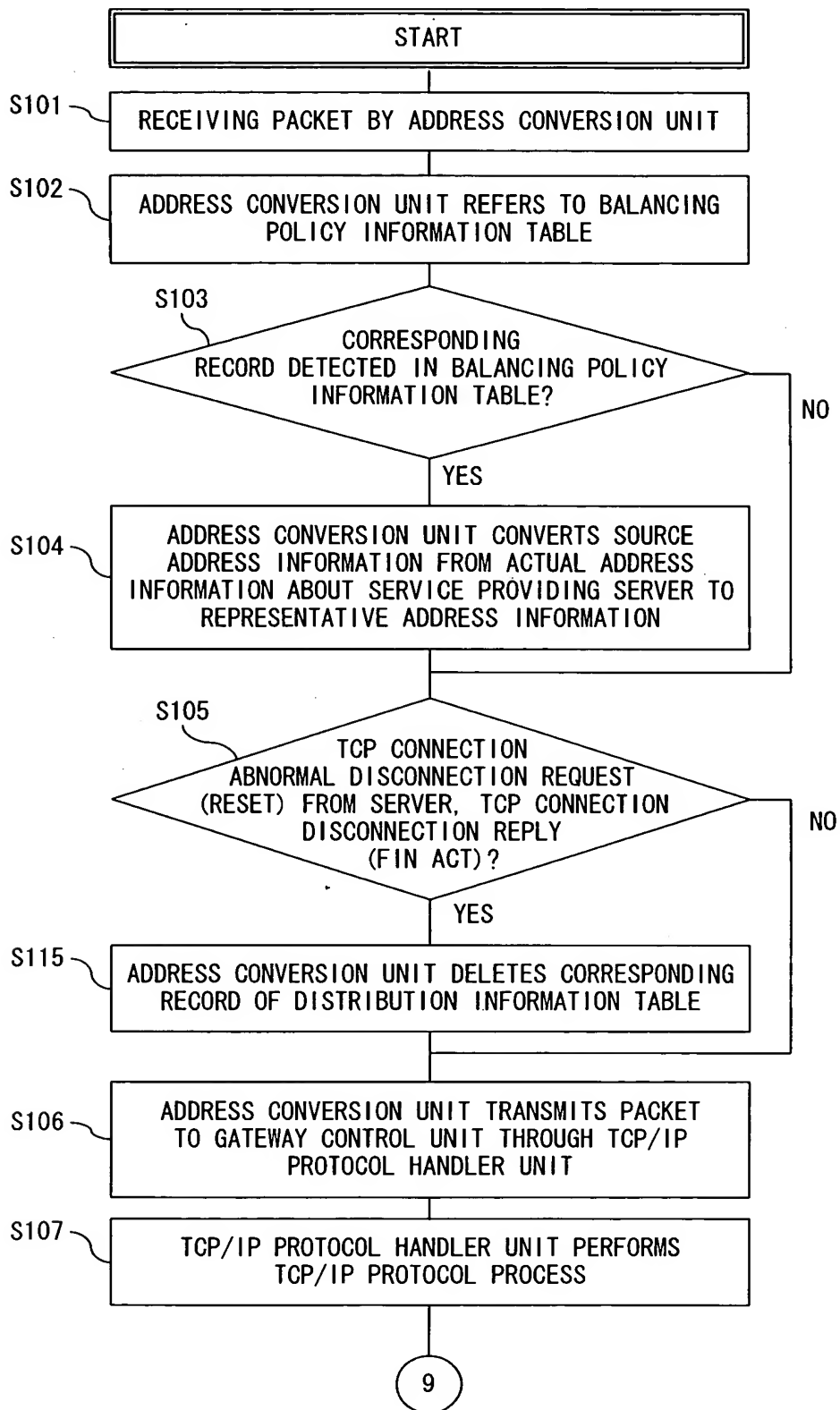


FIG. 20

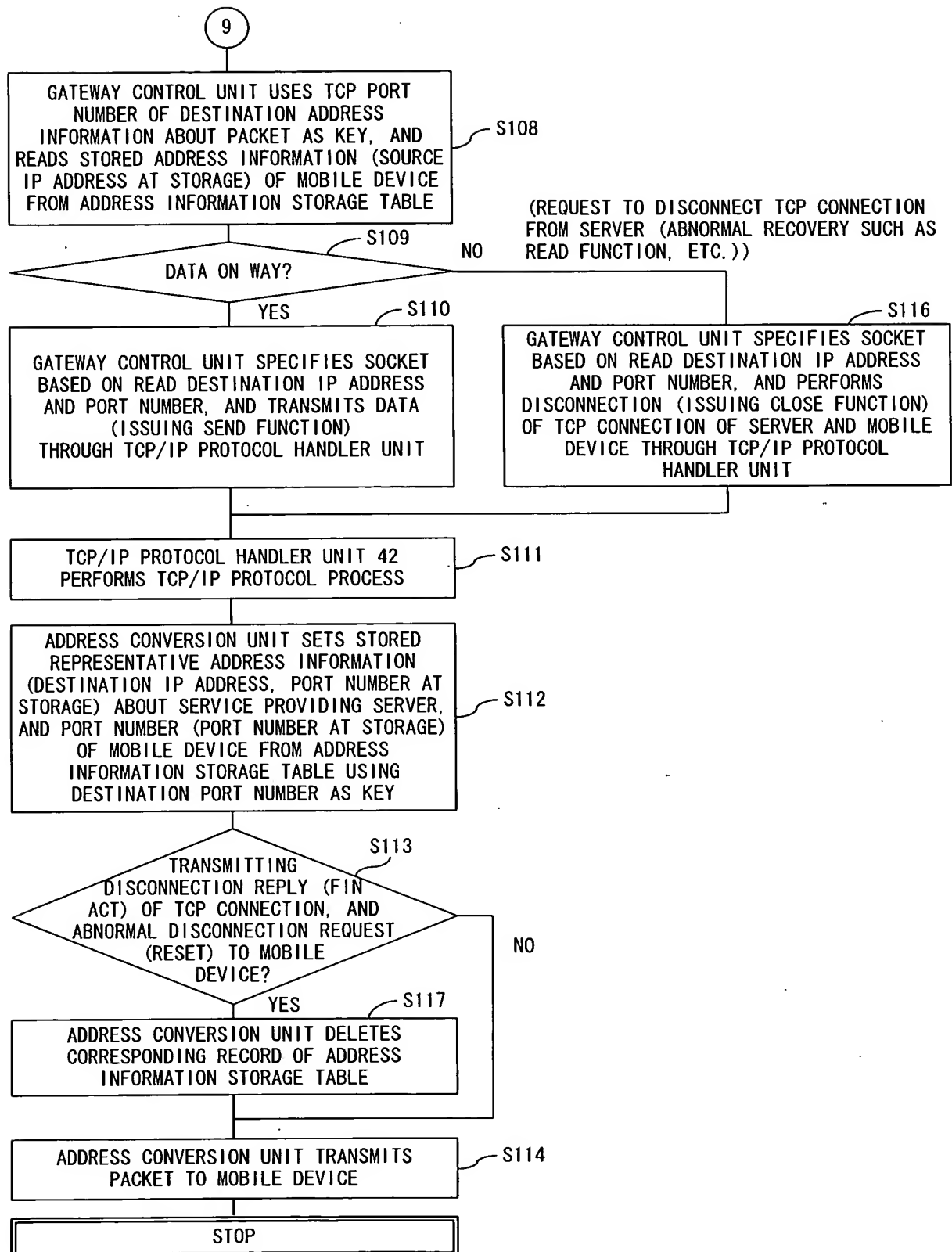


FIG. 21

KEY INFORMATION	STORED ADDRESS INFORMATION			
	SOURCE IP ADDRESS	SOURCE PORT NUMBER	DESTINATION IP ADDRESS	DESTINATION PORT NUMBER
1	10. 32. 0. 1	8081	10. 33. 0. 1	8080
2	10. 32. 0. 2	8081	10. 33. 0. 2	8080
3	10. 32. 0. 3	8081	10. 33. 0. 3	8080
4	10. 32. 0. 4	8081	10. 33. 0. 4	8080

FIG. 22

SERVICE TYPE	SERVICE REPRESENTATIVE IP ADDRESS	NUMBER OF ACTUAL SERVERS	ACTUAL SERVER 1 IP ADDRESS	SERVER STATE	ACTUAL SERVER 2 IP ADDRESS	SERVER STATE
WAP	10. 33. 0. 1	2	10. 33. 1. 10	NORMAL	10. 33. 1. 11	NORMAL
MAIL	10. 33. 0. 2	2	10. 33. 1. 20	NORMAL	10. 33. 1. 21	NORMAL
CHAT	10. 33. 0. 3	2	10. 33. 1. 30	NORMAL	10. 33. 1. 31	NORMAL
EXTERNAL CONNECTION	10. 33. 0. 4	2	10. 33. 1. 40	NORMAL	10. 33. 1. 41	NORMAL

FIG. 23

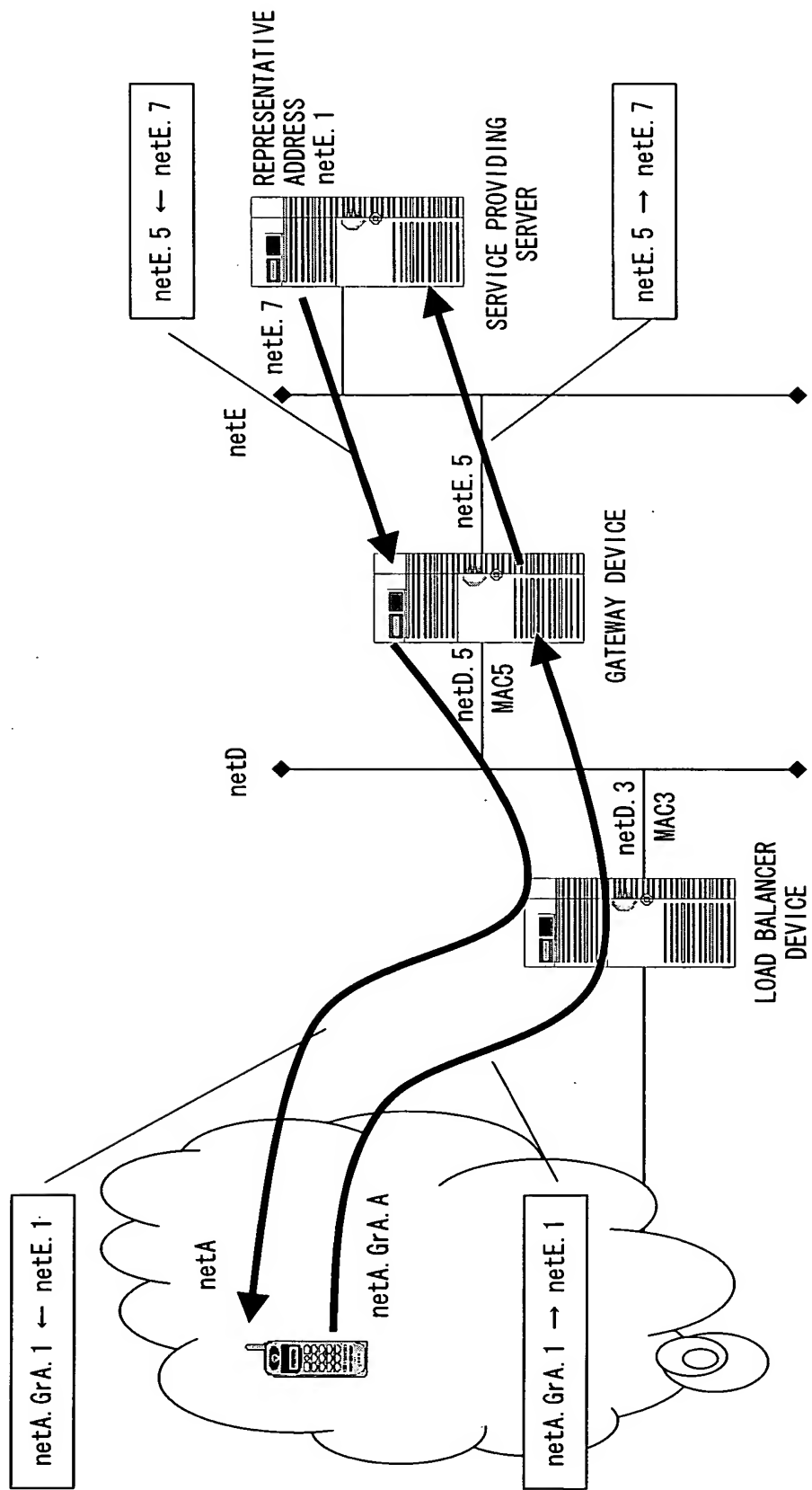


FIG. 24

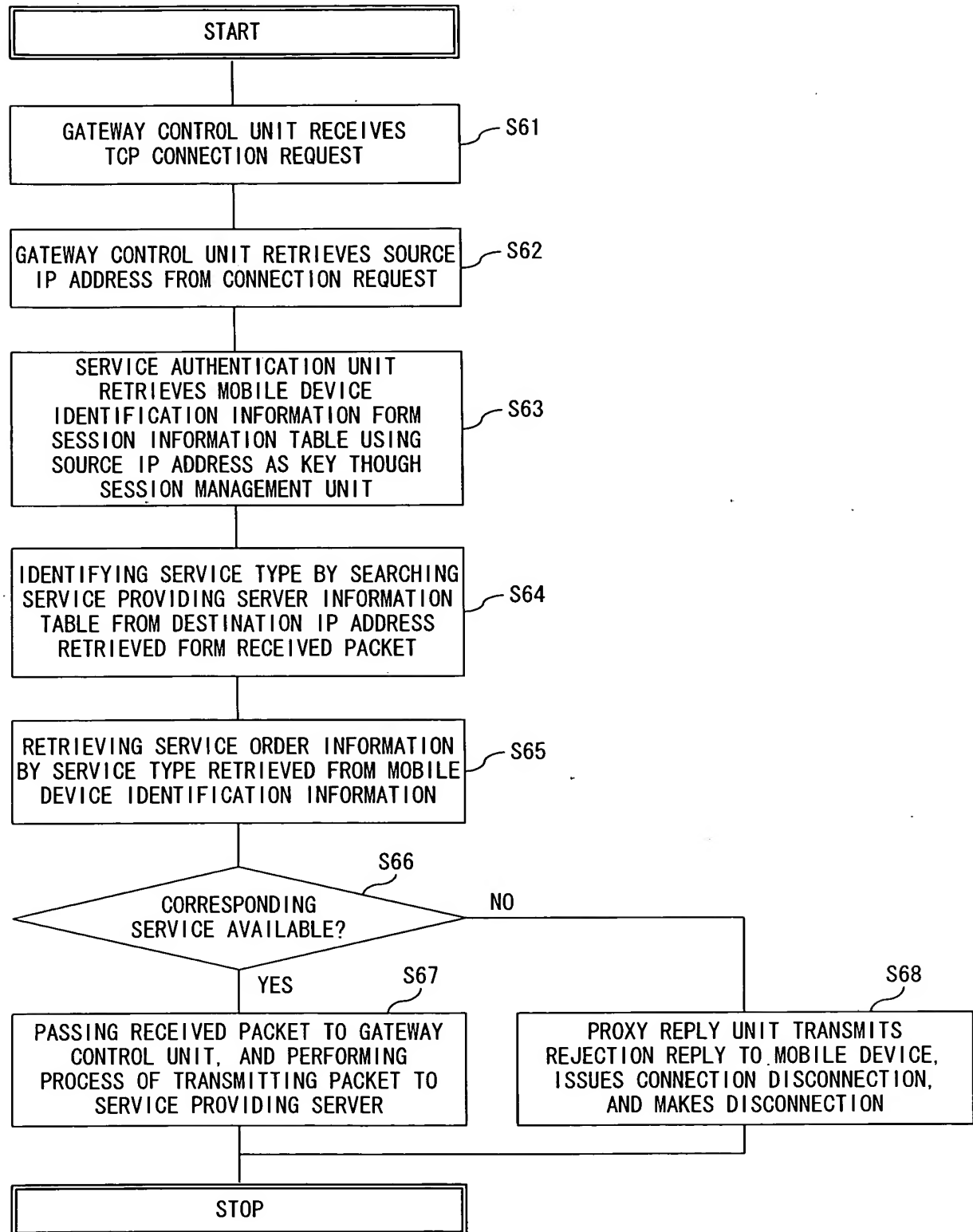


FIG. 25

MOBILE DEVICE IDENTIFICATION INFORMATION	SERVICE ORDER INFORMATION			
	WAP	MAIL	CHAT	EXTERNAL CONNECTION
F50200001	OK	OK	OK	NG
F50200002	OK	OK	OK	NG
F50200003	OK	OK	OK	NG
F50200004	OK	OK	OK	OK

FIG. 26

SERVICE PROVIDING SERVER INFORMATION	
SERVICE TYPE	SERVICE REPRESENTATIVE IP ADDRESS
WAP	10. 33. 0. 1
MAIL	10. 33. 0. 2
CHAT	10. 33. 0. 3
EXTERNAL CONNECTION	10. 33. 0. 4

F I G. 2 7

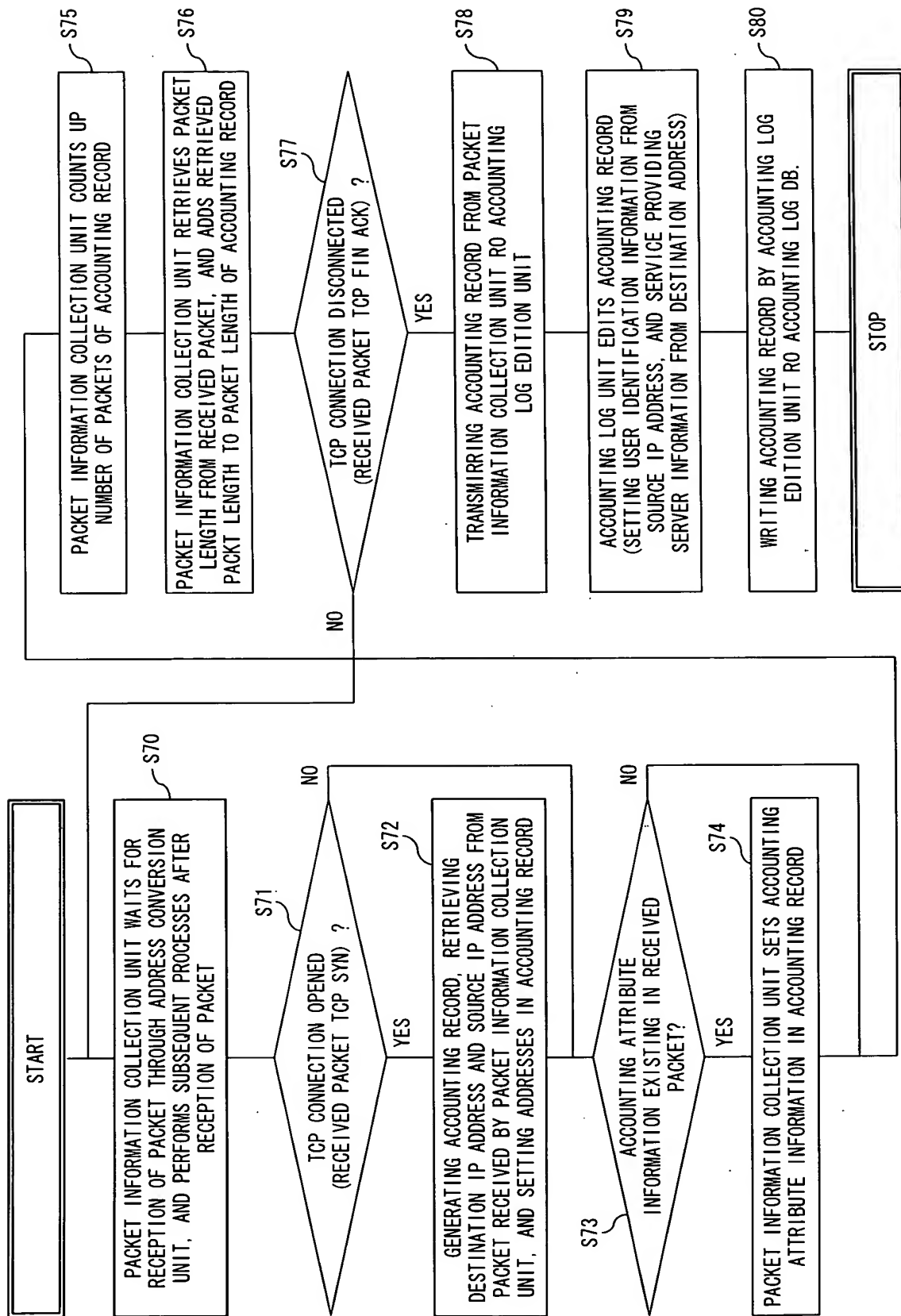


FIG. 28

MOBILE DEVICE IDENTIFICATION INFORMATION	SERVICE PROVIDING SERVER INFORMATION		ACCOUNTING ATTRIBUTE INFORMATION		ACCOUNTING INFORMATION	
	SERVICE TYPE	SERVICE REPRESENTATIVE IP ADDRESS	PROXY ACCOUNTING	CONNECTION SERVER	NUMBER OF PACKETS	TOTAL PACKET LENGTH
F50200001	WAP	10. 33. 0. 1	-	-	5	500
F50200002	MAIL	10. 33. 0. 2	-	-	6	600
F50200003	CHAT	10. 33. 0. 3	-	-	7	700
F50200004	EXTERNAL CONNECTION	10. 33. 0. 4	YES	WWW. Hoo. com	3	300

FIG. 29

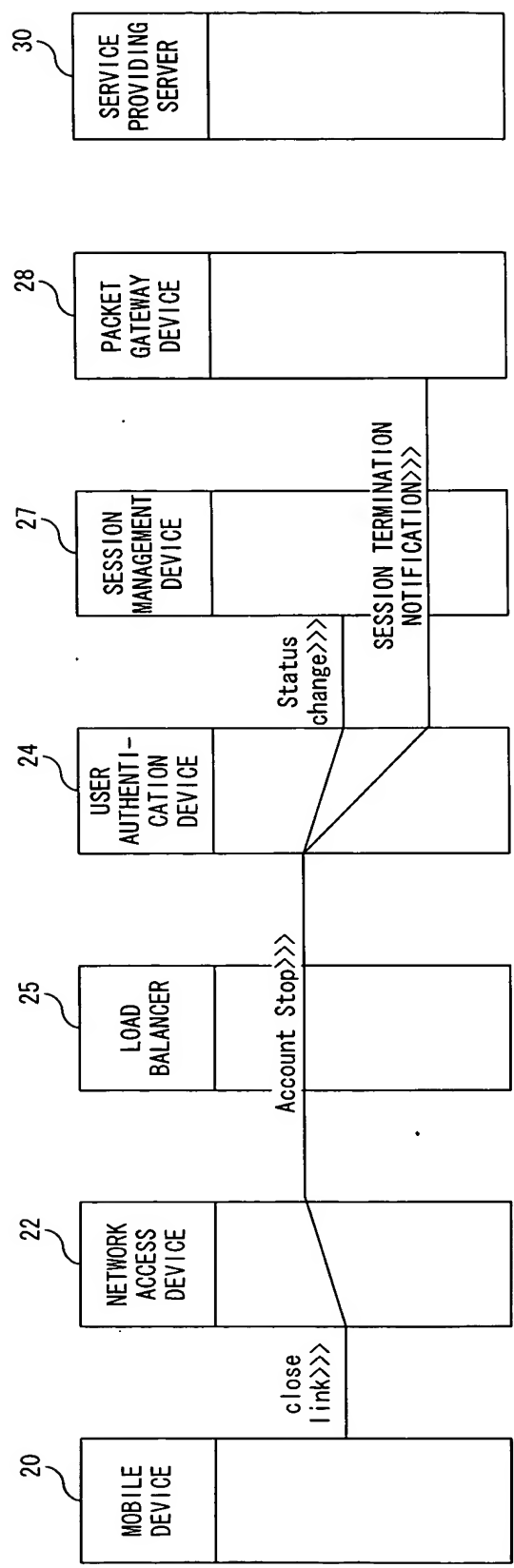


FIG. 30

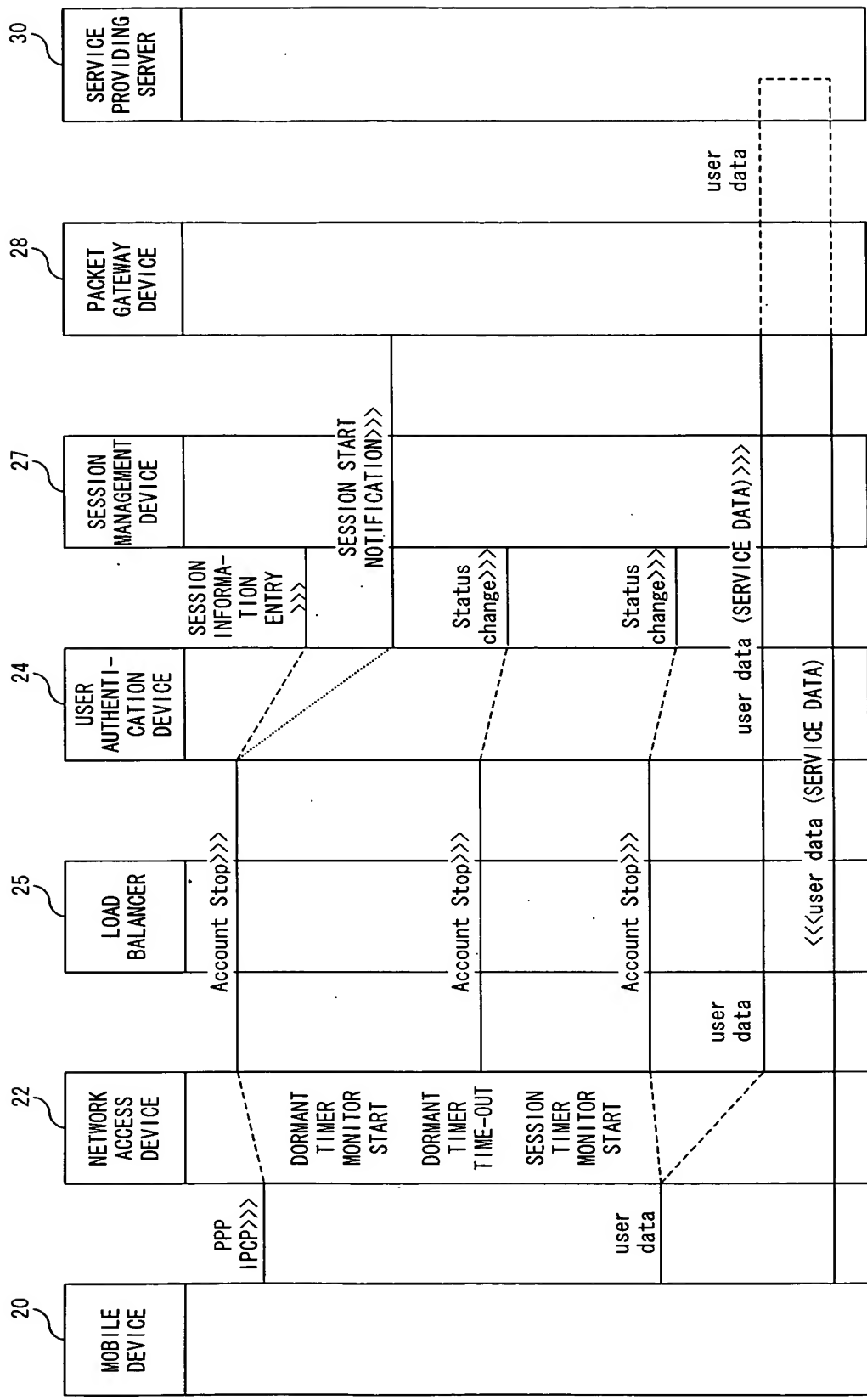


FIG. 31

USER SESSION IDENTIFIER	PROTOCOL IDENTIFICATION	STORED ADDRESS INFORMATION					
		SOURCE IP ADDRESS	SOURCE PORT NUMBER	SOURCE IP ADDRESS	SOURCE PORT NUMBER	ACTUAL SERVER IP ADDRESS	
81	TCP	10. 32. 0. 1	81	10. 33. 0. 1	80	10. 33. 1. 10	
81	TCP	10. 32. 0. 1	81	10. 33. 0. 2	80	10. 33. 1. 20	
82	TCP	10. 32. 0. 2	82	10. 33. 0. 2	80	10. 33. 1. 20	
83	TCP	10. 32. 0. 3	83	10. 33. 0. 3	80	10. 33. 1. 30	
84	TCP	10. 32. 0. 4	84	10. 33. 0. 4	80	10. 33. 1. 40	

FIG. 32

USER SESSION TYPE	WHEN RECORD OF ADDRESS INFORMATION STORAGE TABLE IS GENERATED	WHEN DESTINATION ADDRESS INFORMATION ABOUT RECORD OF ADDRESS INFORMATION STORAGE TABLE IS SET	WHEN DESTINATION ADDRESS INFORMATION ABOUT RECORD OF ADDRESS INFORMATION STORAGE TABLE IS CLEARED	WHEN RECORD OF ADDRESS INFORMATION STORAGE TABLE IS DELETED
LOG-IN UNIT	WHEN "SESSION START" IS RECEIVED FROM USER AUTHENTICATION DEVICE	(1) WHEN DESTINATION ADDRESS INFORMATION IS NOT SET WHEN UP PACKET IS RECEIVED FROM MOBILE DEVICE (2) DESTINATION ADDRESS INFORMATION IS DIFFERENT FROM RECEIVED PACKET (ADDING RECORD)	-	WHEN "SESSION TERMINATION" IS RECEIVED FROM USER AUTHENTICATION DEVICE
SERVICE UNIT	WHEN "SESSION START" IS RECEIVED FROM USER AUTHENTICATION DEVICE	(1) WHEN DESTINATION ADDRESS INFORMATION IS NOT SET WHEN UP PACKET IS RECEIVED FROM MOBILE DEVICE (2) DESTINATION ADDRESS INFORMATION IS DIFFERENT FROM RECEIVED PACKET	-	WHEN "SESSION TERMINATION" IS RECEIVED FROM USER AUTHENTICATION DEVICE
PACKET UNIT (UDP)	WHEN "SESSION START" IS RECEIVED FROM USER AUTHENTICATION DEVICE	WHEN UP PACKET IS RECEIVED FROM MOBILE DEVICE	WHEN DOWN PACKET IS TRANSMITTED TO MOBILE DEVICE	WHEN "SESSION TERMINATION" IS RECEIVED FROM USER AUTHENTICATION DEVICE
CONNECTION UNIT (TCP)	WHEN "SESSION START" IS RECEIVED FROM USER AUTHENTICATION DEVICE	WHEN CONNECTION ESTABLISHMENT REQUEST (TCP SYN PACKET) IS RECEIVED FROM MOBILE DEVICE	WHEN DISCONNECTION REPLY (FIN ACT PACKET) IS TRANSMITTED TO MOBILE DEVICE	WHEN "SESSION TERMINATION" IS RECEIVED FROM USER AUTHENTICATION DEVICE

F I G. 3 3

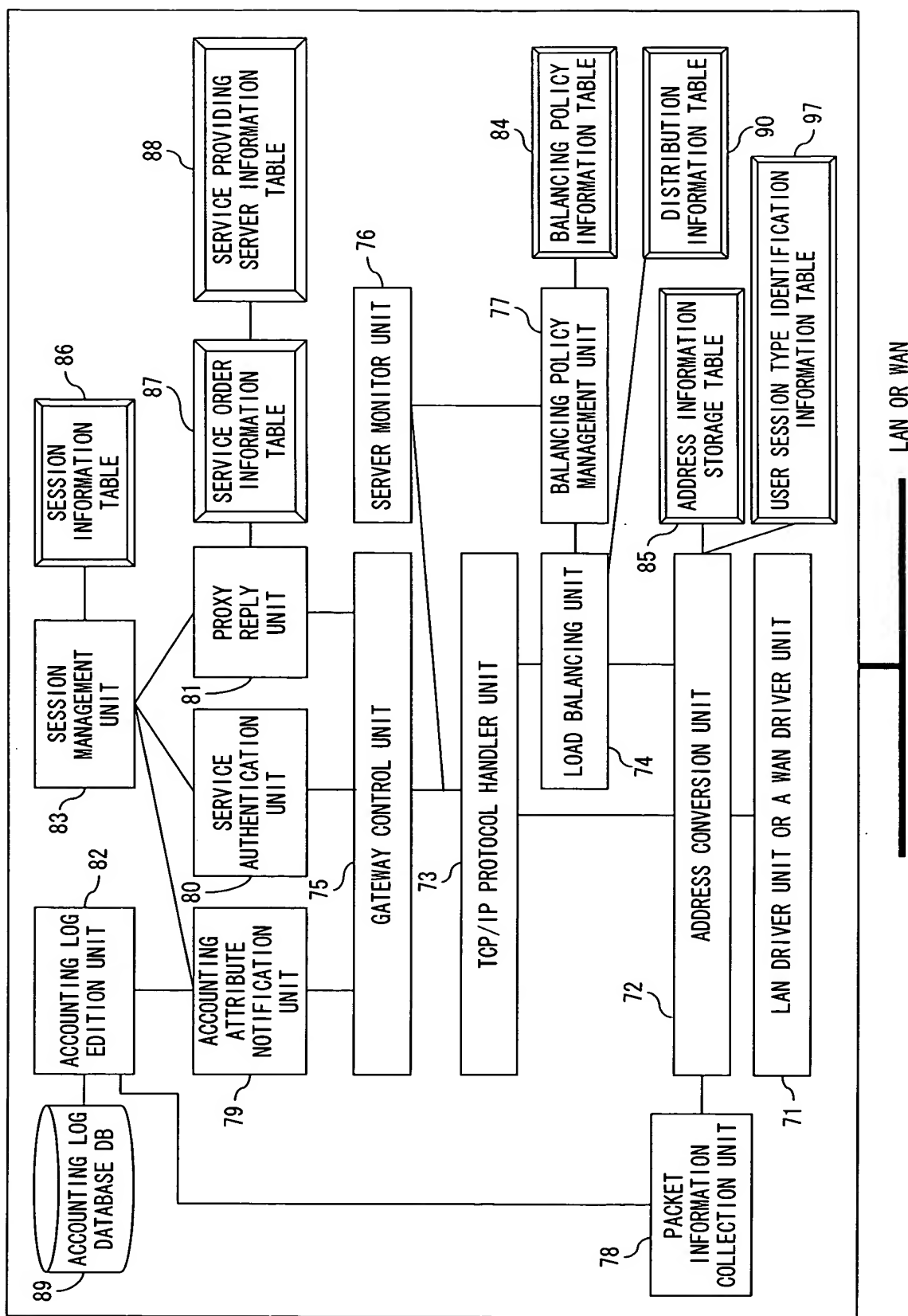


FIG. 34

PROTOCOL TYPE	SERVICE REPRESENTATIVE IP ADDRESS	DESTINATION PORT NUMBER	USER SESSION TYPE
TCP	10. 33. 0. 1	80	SERVICE UNIT
TCP	10. 33. 0. 2	80	PACKET UNIT
TCP	10. 33. 0. 3	80	CONNECTION UNIT
TCP	10. 33. 0. 4	80	LOG-IN UNIT

F I G. 3 5

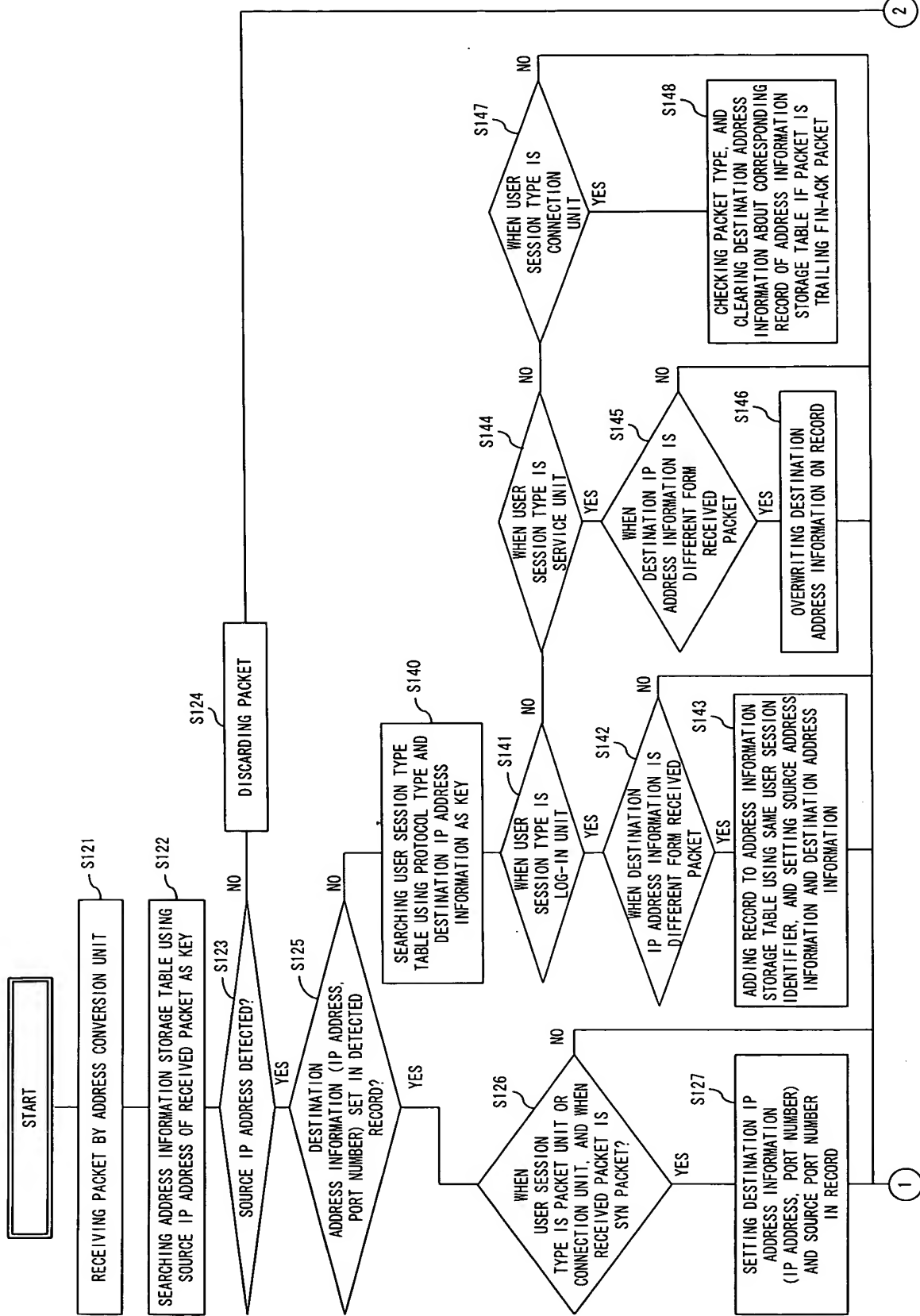


FIG. 36

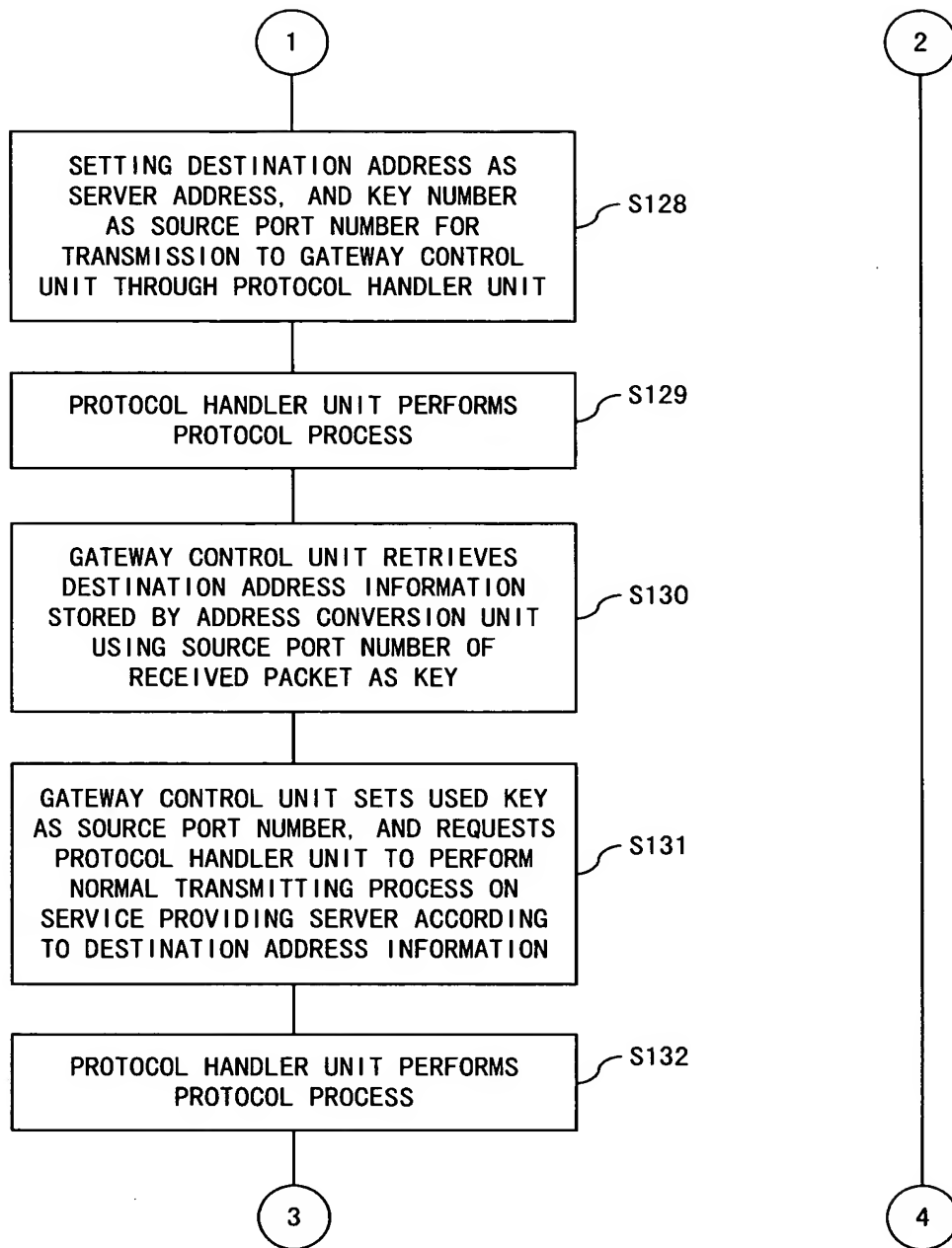


FIG. 37

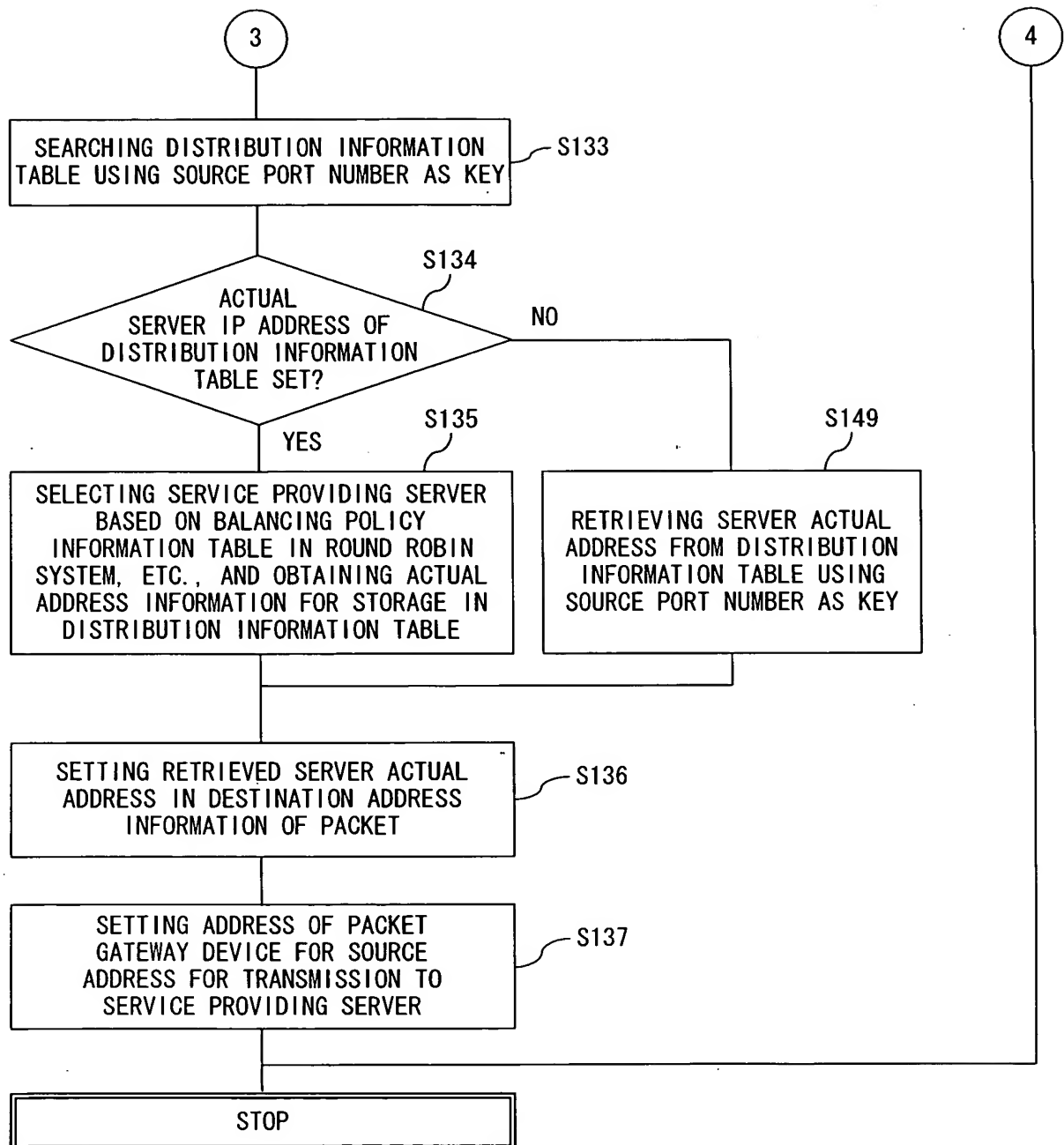


FIG. 38

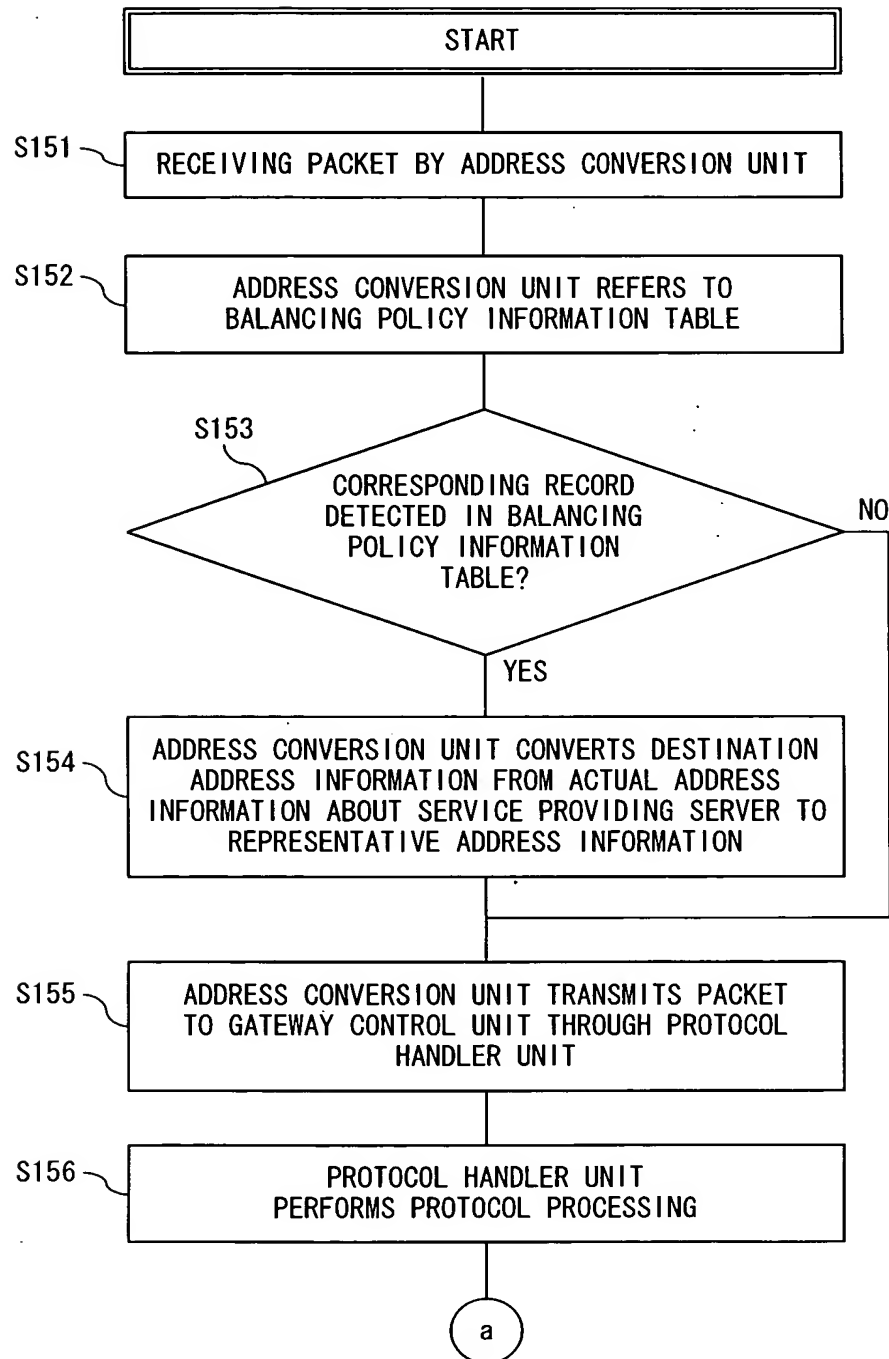


FIG. 39

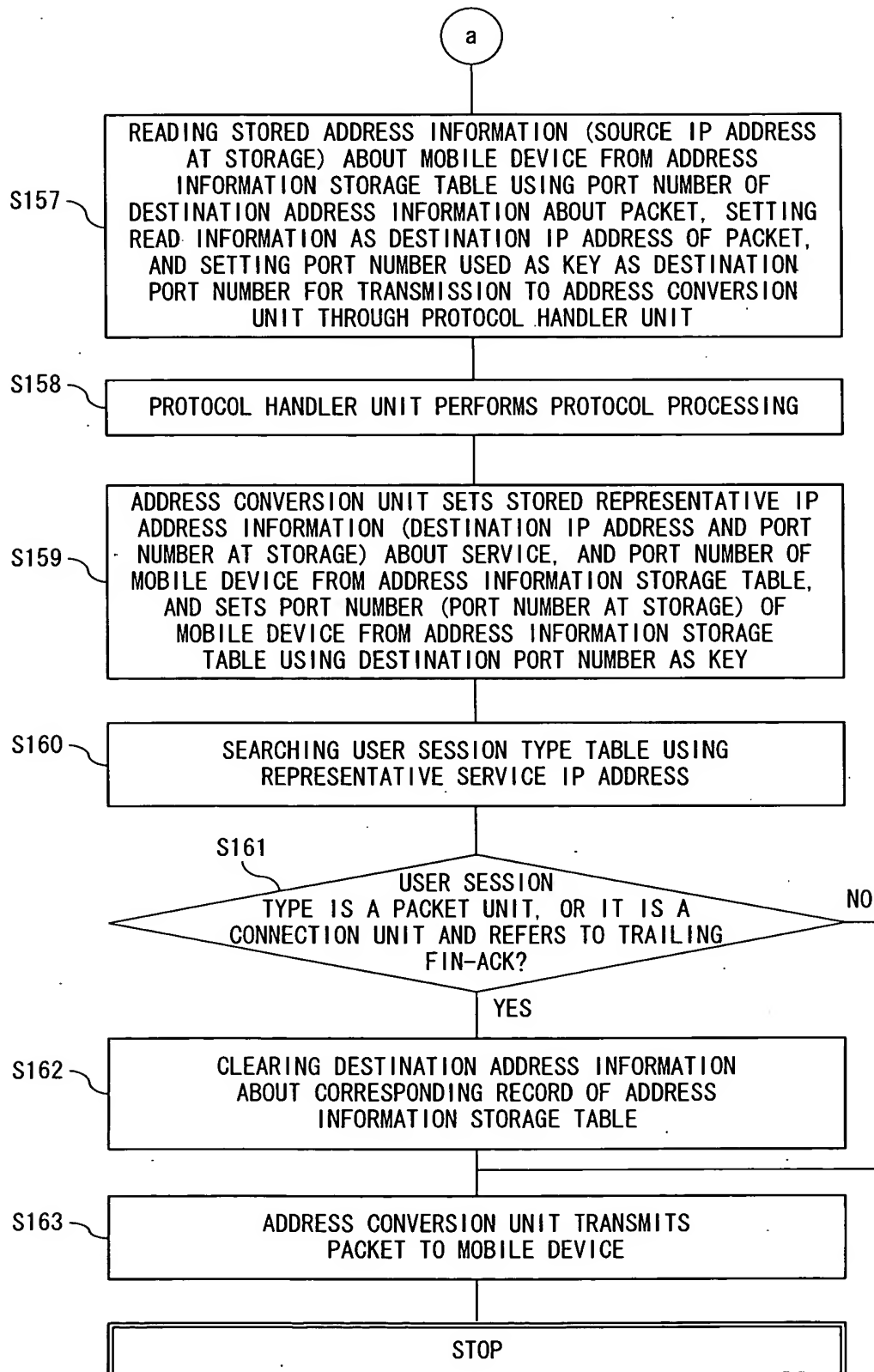


FIG. 40

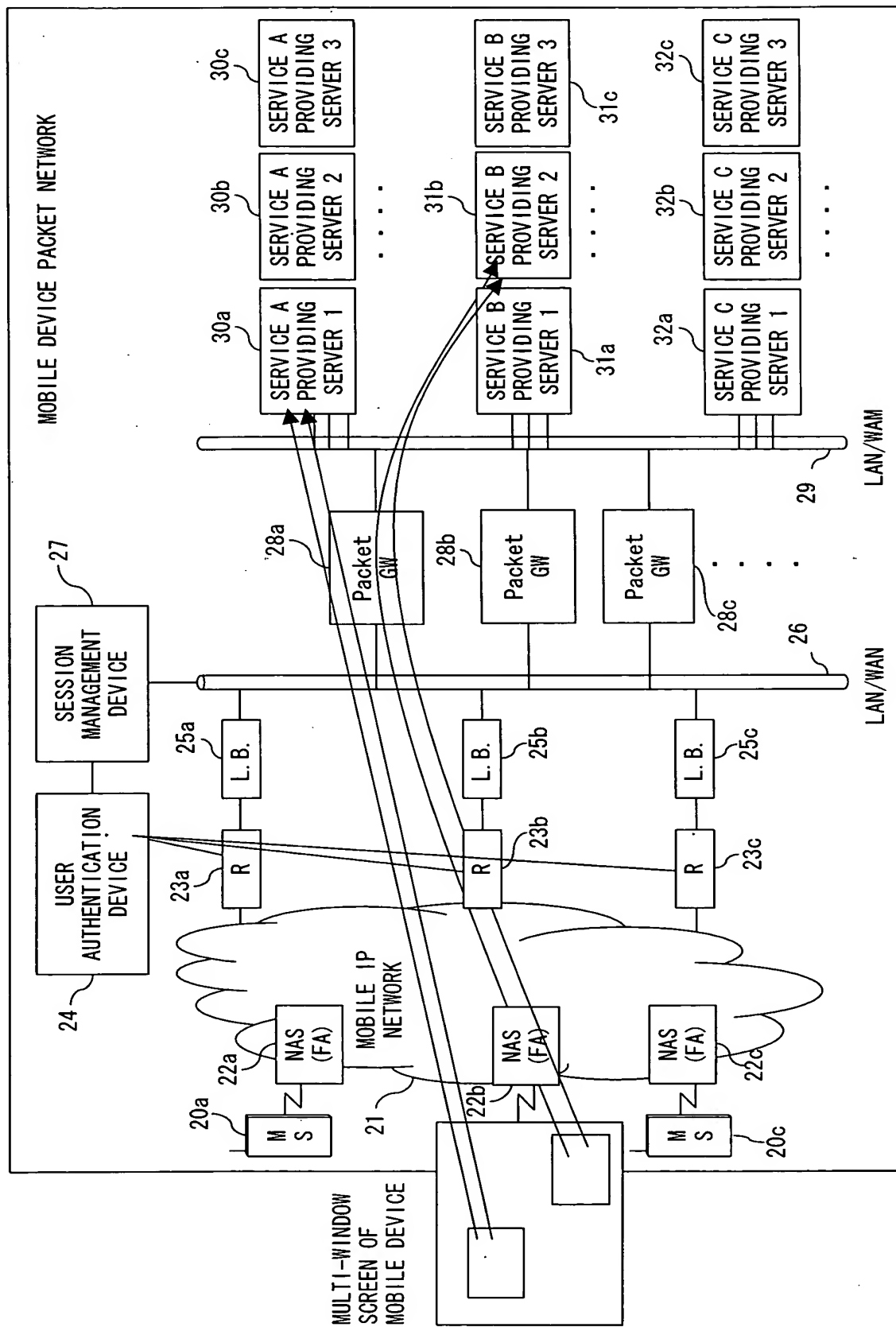


FIG. 41

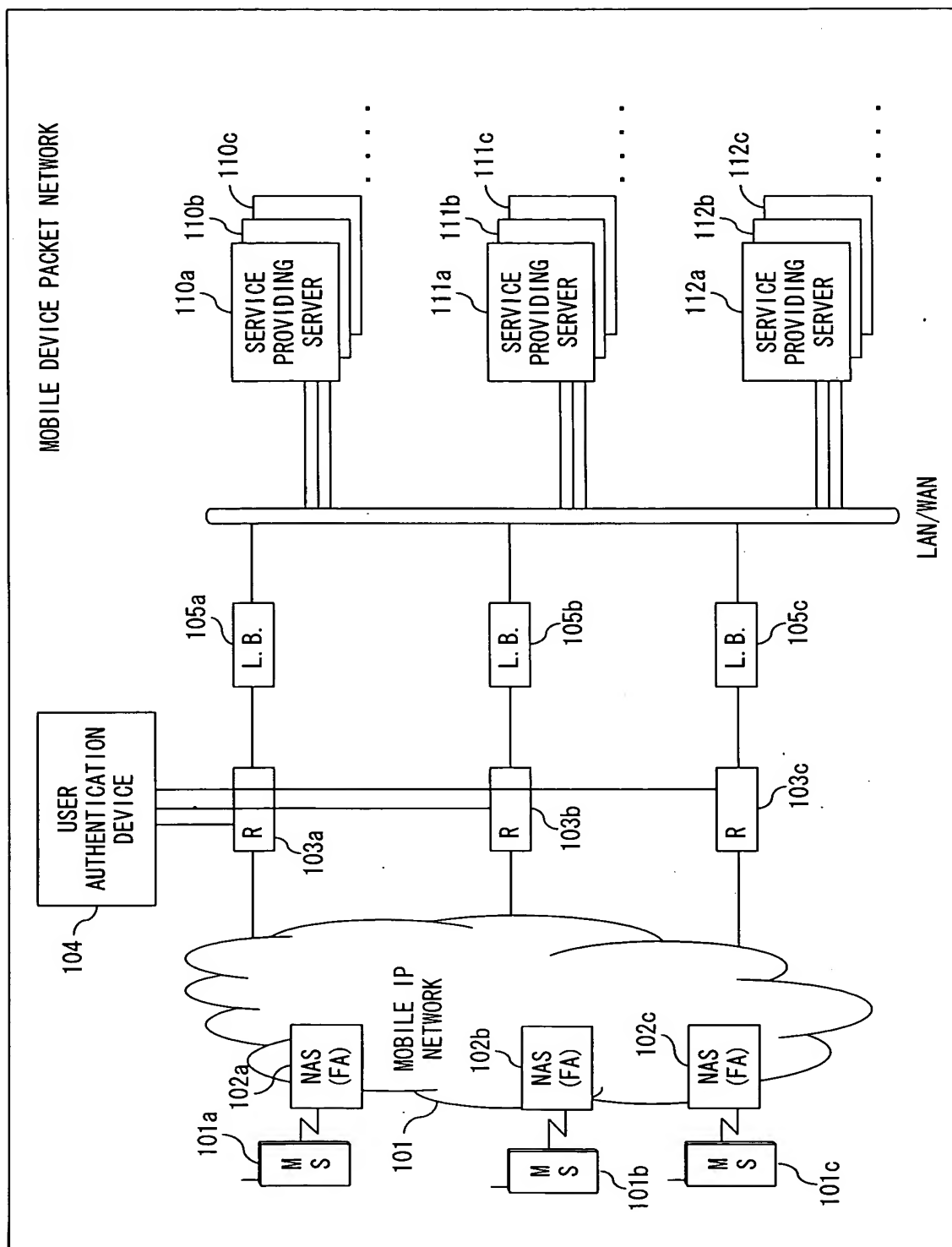


FIG. 42

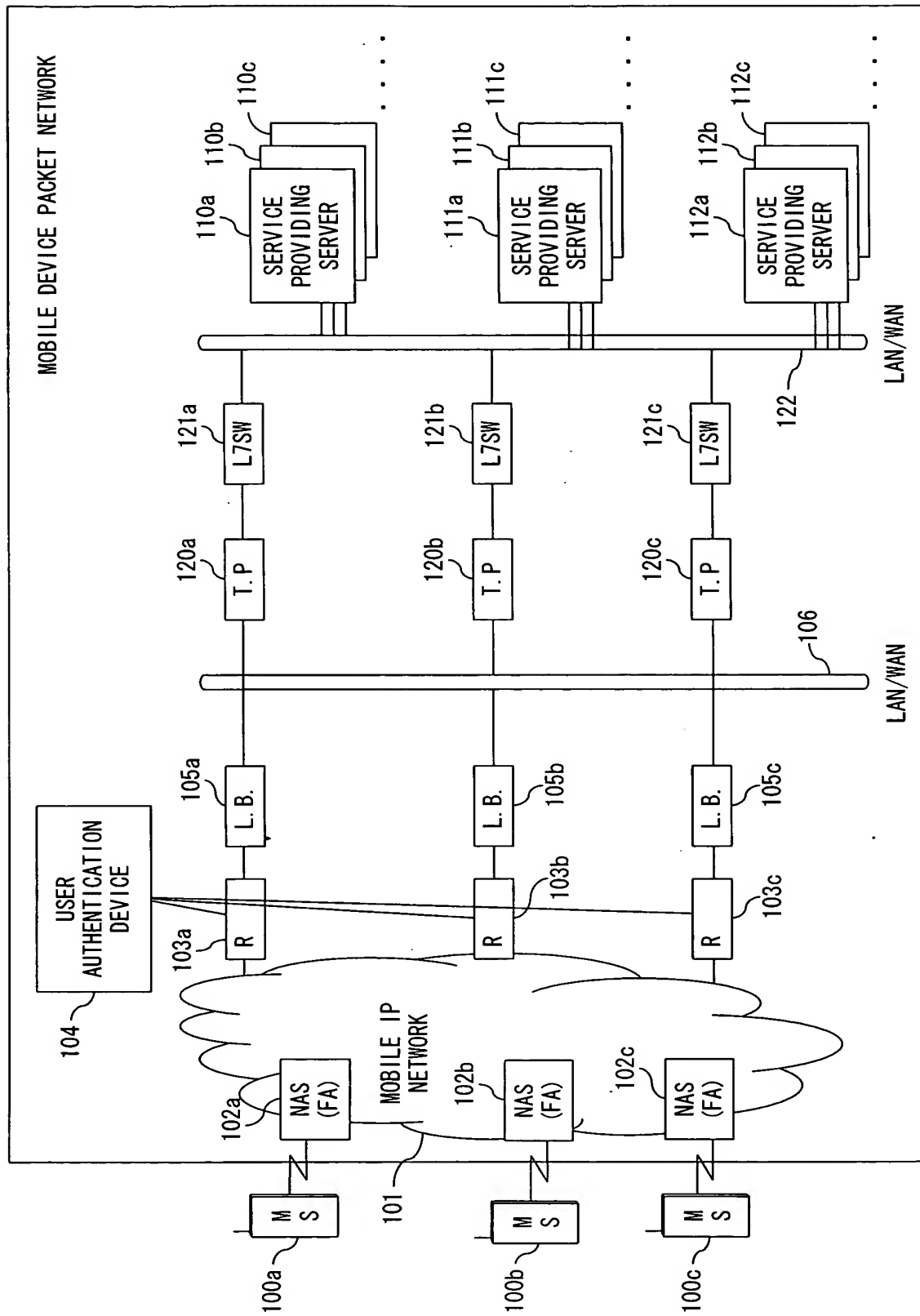


FIG. 43

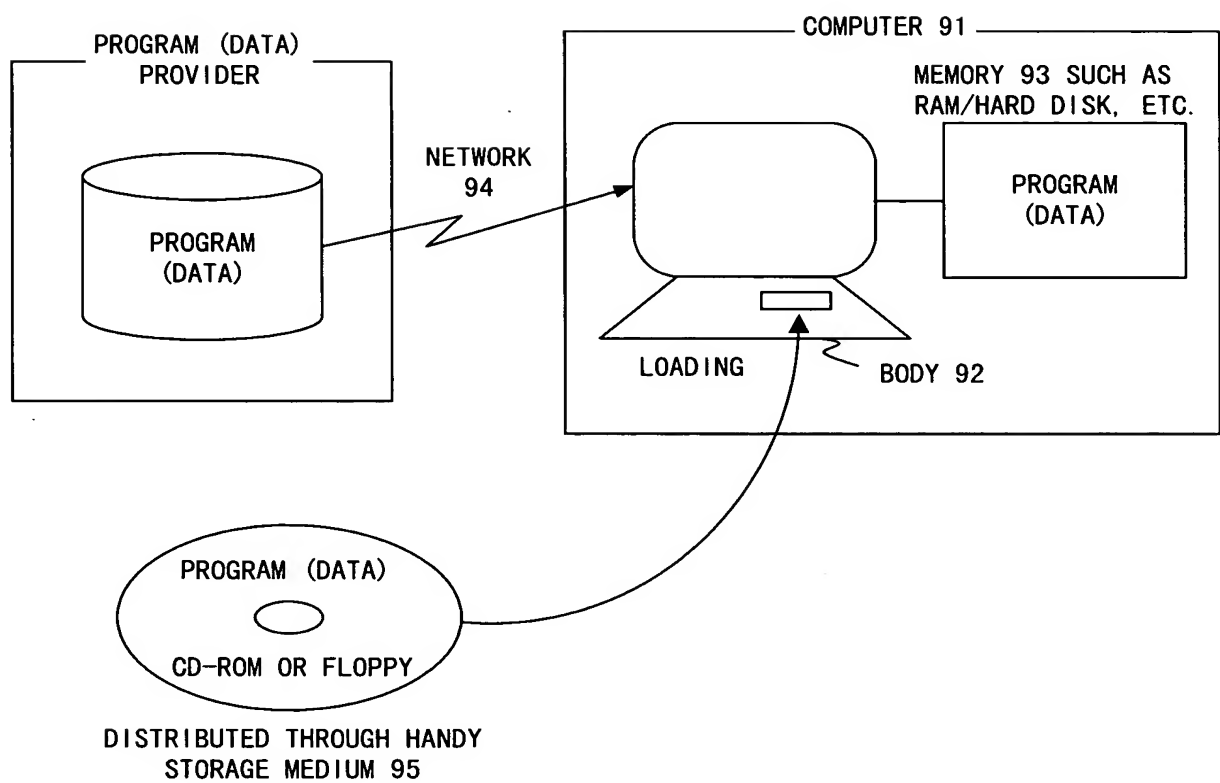


FIG. 44